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ABSTRACT

The document describes the role of the job coach as the key facilitator of community employment for mentally retarded persons. Three case studies evaluate three programs associated with the Illinois Supported Employment Program to identify the real and perceived duties of the job coach. An introductory article by Frank Rusch and others is titled: "Supported Employment in Illinois: Economics, Industry and the Disabled Worker." The paper examines the job coach role, presents survey results showing qualifications desired by Illinois agencies in potential job coaches, compares these qualifications to those of job coaches actually hired, and provides information about average job coach salaries and turnover rate. Finally demographics and costs of implemented supported employment programs are considered. Each of the case studies is presented in terms of the community, the agency, the supported employment program, the demographics of the job coach, the organization of the position, and the role of the job coach (including task analysis, direct training, recording data, and on-site job development). This is followed by a discussion of the perceptions of job coach duties by key stakeholders (program coordinators, employers, co-workers, agency employees, parents, and workers). Implications of the case study findings for direct training, stakeholder perceptions, organization of the position, and professionalization of the role are drawn. (DB)

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Supported Employment in Illinois: Job Coach Issues

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Volume 3

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TRANSITION INSTITUTE AT ILLINOIS

Supported Employment in Illinois:

Job Coach Issues

Volume 3

Debbie L. Winking,

Lizanne DeStefano,

and

Frank R. Rusch

The Secondary Transition Intervention Effectiveness Institute

University of Illinois at Urbana-Champaign

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The following principles guide our research related to the education and employment of youth and adults with specialized education, training, employment, and adjustment needs.

- Individuals have a basic right to be educated and to work in the environment that least restricts their right to learn and interact with other students and persons who are not handicapped.
- Individuals with varied abilities, social backgrounds, aptitudes, and learning styles must have equal access and opportunity to engage in education and work, and life-long learning.
- Educational experiences must be planned, delivered, and evaluated based upon the unique abilities, social backgrounds, and learning styles of the individual.
- Agencies, organizations, and individuals from a broad array of disciplines and professional fields must effectively and systematically coordinate their efforts to meet individual education and employment needs.
- Individuals grow and mature throughout their lives requiring varying levels and types of educational and employment support.
- The capability of an individual to obtain and hold meaningful and productive employment is important to the individual's quality of life.
- Parents, advocates, and friends form a vitally important social network that is an instrumental aspect of education, transition to employment, and continuing employment.

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Preface

Community-based employment programs have become increasingly important in the overall service delivery system of agencies serving adults with disabilities. This impetus for change from sheltered to community-based programs can be attributed to at least three factors in our society.

First, a new type of adult clientele has emerged from public school special education programs. Many of the students graduating from the public schools possess numerous functional skills fostered by a background rich in community-based training. Second, continuum-based service delivery systems that have traditionally not promoted movement of clients through the system have in many cases produced long waiting lists for intake into adult service agency sheltered programs. According to Bellamy, Rhodes, Bourbeau, and Mank (1986), the majority of individuals with mental retardation are served in the lower levels of the service delivery continuum -- day activity and work activity programs. Traditionally, the probability of progression toward community employment from these programs has been nonexistent. In fact, if each consumer had equal probability of moving along the traditional continuum of adult services and was placed in a day activity program after exiting school, it would take an average of 47 to 58 years to move through program levels to community employment (Bellamy et al.,

1986). Third, many community-based vocational programs have evolved as a general response to the attitude espoused long ago by proponents of the principle of normalization. The belief on the part of many parents and professionals that persons with disabilities should live and work among persons without disabilities under as "normal" conditions as possible has guided the deinstitutionalization movement of the early 1970s and has led to an emphasis on community-based employment.

Supported employment programs have recently emerged as a powerful employment option for individuals who for the most part have been excluded from community employment because of the severity of their disability or behavioral problem (Rusch, Trach, Winking, Tines, & Heal 1987; Vogelsberg, 1986; Wehman, 1986). According to the Department of Education (1985), the concept of supported employment may be defined as "paid work in a variety of integrated settings, particularly regular work sites, especially designed for severely handicapped individuals irrespective of age or vocational potential" (p. 217). These programs provide ongoing training to persons with severe disabilities who are not expected to maintain employment without continued support.

Because of the degree of permanence of service delivery at the worksite, supported employment programs typically operate as an integral part of an adult service agency; at the same time, however, staff remain outside the physical environs of the

agency. This physical separation of supported employment programs from their umbrella agencies has implications for the staffing and management of such programs. Compared to other vocational service delivery options, supported employment services are unique because of the population they serve and the delicate balance that must be maintained between the needs of the client and those of business or industry, in order to provide long-term support.

Because supported employment programs are not housed within the walls of the adult service agency but rather in community businesses, these programs must rely heavily upon direct service personnel. This newly created direct service role has been given various titles including job trainer, employment specialist, and job coach, but regardless of the name, the functions are the same: to manage the employment site and to act as the liaison between all the groups involved in the supported employment process. Effective communication must be maintained among employer, co-workers, parents and residential staff, program coordinators, agency staff, and the workers with developmental disabilities. The roles of manager and chief communicator at the work site involve the coordination and execution of a variety of tasks in any given day, including direct training, job development, and job modification.

Despite reliance on the skills of the job trainer as the crucial link in the supported employment process, the position

continues to be a poorly paid one. Consequently, it is difficult to attract qualified professionals, and the turnover rate is notoriously high, according to data collected from a job coach survey conducted by the Illinois Supported Employment Program at the University of Illinois. Data were collected by technical assistance staff on 30 State-funded supported employment programs in Illinois. In February 1987, the average number of job coaches employed per agency was 2.5. Of all agencies reporting turnover, the average number of times job trainers were hired was 5.6, which indicates a more than 2-to-1 ratio of job trainers per position over an 11-month period.

There is a lack of available literature delineating and analyzing job coach duties. Although many persons with an interest in supported employment have definite ideas about what a job coach's duties should involve, and although researchers have speculated about the competencies involved in the position (e.g., Cohen, Patton, & Melia, 1985; Schutz, 1986; Wehman & Melia, 1985), there is an absence of documented empirical evidence of the job coach's activities on a day-to-day basis.

According to Wehman and Melia (1985), the skills required of a successful job coach include: (a) day-to-day training of workers using the least intrusive methods, (b) analyzing the job, (c) developing employer, worker, rehabilitation counselor, and parental confidence in the program, (d) modeling appropriate interactions and training job-related behaviors, and (e)

interacting in a timely and open manner with rehabilitation counselors who are purchasing job trainer services. Because of the variety of activities that must be performed on any given day, these authors also stated that the successful job trainer must be able to shift gears easily from the role of direct trainer to that of consultant or site manager. These authors did not, however, describe the procedures that were used to pinpoint the critical skills performed by job trainers.

Following the outline of job coach tasks by Wehman and Melia (1985), a national study using a Delphi technique was completed in October 1985 by Harold Russell Associates. The Delphi technique used a heterogeneous panel of nine members who were involved in some capacity with supported employment or transitional employment programs. Panel members represented a variety of fields and disciplines, including special education, supported employment models, rehabilitation agencies, transitional employment services, departments of rehabilitation, mental retardation agencies, Projects-with-Industry programs, and parent advocacy. The panel members first filled out a series of three questionnaires and then attended a follow-up seminar in order to reach a general consensus on the basic skills needed by management and direct service staff of community-based employment programs.

The results and recommendations of the study included the following list of trainer functions: (a) to provide on-the-job

training to severely disabled persons, (b) to analyze job tasks and develop training programs, (c) to provide supervision to workers, (d) to utilize behavior management techniques, (e) to promote integration of workers with disabilities with co-workers and employers, (f) to utilize fading techniques to withdraw staff or support services where appropriate; and (g) to negotiate work-related issues with employers (Cohen, Patton, & Melia, 1985).

Recommendations also included suggestions that the direct service position be considered a professional position with a salary comensurate with traditional professional positions in rehabilitation and education, and the title of "employment training specialist" be used to describe individuals performing the previously mentioned functions. Finally, the study stated that specific functions delineated by the panel would have to be defined concretely, and only represented a minimal list of possible duties of the job coach.

This brief review presents published literature on the duties and functions that are thought to be critical to the position of job coach. In some cases these functions represent the delineation of duties for job coaches according to individuals who are considered experts in supported employment and transitional employment. There are as yet no studies in the literature that validate these perceived duties with the actual observation and analysis of what a job coach does on a

day-to-day basis to facilitate the employment of workers with severe disabilities.

Therefore, as a new and emerging service delivery option, supported employment programs must be analyzed, especially with regard to the role of job trainer as the primary facilitator of community employment for individuals with severe disabilities.

The primary purpose of Supported Employment in Illinois: Job Coach Issues is to illuminate the role of the job coach as key facilitator of community employment for a population whose members were previously restricted to segregated settings and were considered inconsequential producers. The three case studies that follow evaluate in depth three programs associated with the Illinois Supported Employment Initiative to discover the real and perceived duties involved in the position of the job coach. This report has implications for the inservice and preservice training of job trainers and may be used as a resource by those professionals who want to replicate supported employment programs within their own agency.

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Supported Employment in Illinois: Economics, Industry, and the Disabled Worker

Frank R. Rusch, Debbie L. Winking, John S. Trach, Jeffrey J. Tines, and John Johnson

Adult service providers in Illinois have established supported employment as a successful alternative to traditional sheltered employment. As supported employment becomes increasingly accepted, attention has turned toward issues concerning the implementation of these programs and particularly to the economic effects of supported employment on the relationship between industry and the disabled worker. Because supported employment involves the integration of the disabled worker into the community, the role of the direct service provider or job coach has become central to the effective implementation of such programs.

This paper examines the role of the job coach and presents survey results that describe the educational background and work experience that Illinois adult service agencies are

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Kiernan, W., & Schalock, R. (in press). A look ahead: Economics, business, and industry. Baltimore, MD: Paul H. Brookes.

looking for in potential job coaches. These qualifications are then contrasted with a profile of the job coaches hired in the program from January 1986 to January 1987.

In addition, information is provided about average job coach salaries and turnover rate. Finally, the paper explores the extent to which supported employment model programs have been implemented and discusses selected demographics and costs.

Employee Characteristics

In Illinois, supported employment serves more than 625 handicapped individuals. These services are provided by means of three models: individual placements, enclaves, and mobile work crews. According to the data reported by 27 model programs (N = 334), 71% of those receiving supported employment services are employed under the enclave model. Most lower-functioning workers receive services under this model, including 93% of those with severe and profound mental retardation. Predictably, individuals working in enclaves have a lower average full scale IQ score than individuals in either individual placement or mobile work crews, and 34% of all individuals in enclaves previously received services from developmental training programs (See Table 1).

The individual placement model in Illinois serves target employees with an average full scale IQ score of more than 61. In addition, 56% of all workers in individual placement

Table 1

SEP Characteristics by Type of Placement

Employee characteristic	Individual placement (N = 66)	Enclave (N = 233)	Mobile work crew (N = 35)
Average age	29 (N = 58)	31 (N = 158)	35 (N = 21)
Sex			
Male	24	95	12
Female	31	62	7
Primary impairment			
Borderline	9	21	2
Mild	26	49	10
Moderate	10	45	2
Severe	0	22	2
Profound	0	5	0
Average FSIQ	61 (N = 45)	54 (N = 142)	58 (N = 16)
Previous placement			
Day Training I	0	0	2
Day Training II	2	70	15
Regular Work Program	38	59	13
Work Adjustment Training	10	31	3
Other	16	44	2

Note Data reported in this table represent information received from model programs. These figures do not reflect full reporting by these programs and consequently are only representative.

previously received services in a regular work program.

Mobile work crews serve the fewest number of workers (N = 35). Characteristically, the majority of these workers are classified as mildly mentally retarded (63%). Their average full scale IQ score is higher than that of workers in the enclave model, but lower than that of workers in individual placement jobs. It is most interesting that members of this group earn substantially less if they are employed on mobile work crews than if they are employed in enclaves or individual placements (see Table 6).

Analysis of Job Coach Intervention

The job coach has emerged as the key staff member in facilitating this new community employment option for persons traditionally employed in sheltered workhops. The job title given to these direct service providers varies across agencies, including job coach, vocational training specialist, employment training specialist, and community supervisor, but the function is the same: to enable persons with handicaps to enter into the mainstream of society through community employment.

Job Coach Duties

The position of the job coach differs from that of other direct service personnel employed by adult service agencies in the type and variety of skills performed. Because supported employment is community based, job coaches must function on a day-to-day basis without the array of support staff present in the traditional sheltered workshop (including secretaries and administrators as well as behavioral training specialists and case coordinators). Job coaches are required to perform a management as well as direct service function and represent the agency to the business providing employment and the community at large. The job coach is the liaison between all the groups involved in the supported employment process, including the employer, parents, co-workers, agency personnel, and the worker.

The duties of the coach include direct training responsibilities of specific job and social skills to on-site job development, worker advocacy, and agency public relations. Flexibility is an essential trait for the successful job coach. For example, on a given day a job coach's tasks may range from teaching a worker a single component of a floor-sweeping task to meeting with a group of employers and line supervisors concerning job enlargement possibilities. The two tasks obviously require very different competencies. Because of the level of disability of individuals targeted for service

in supported employment programs, however, much of the job coach's time is spent on intervention activities.

Intervention Time

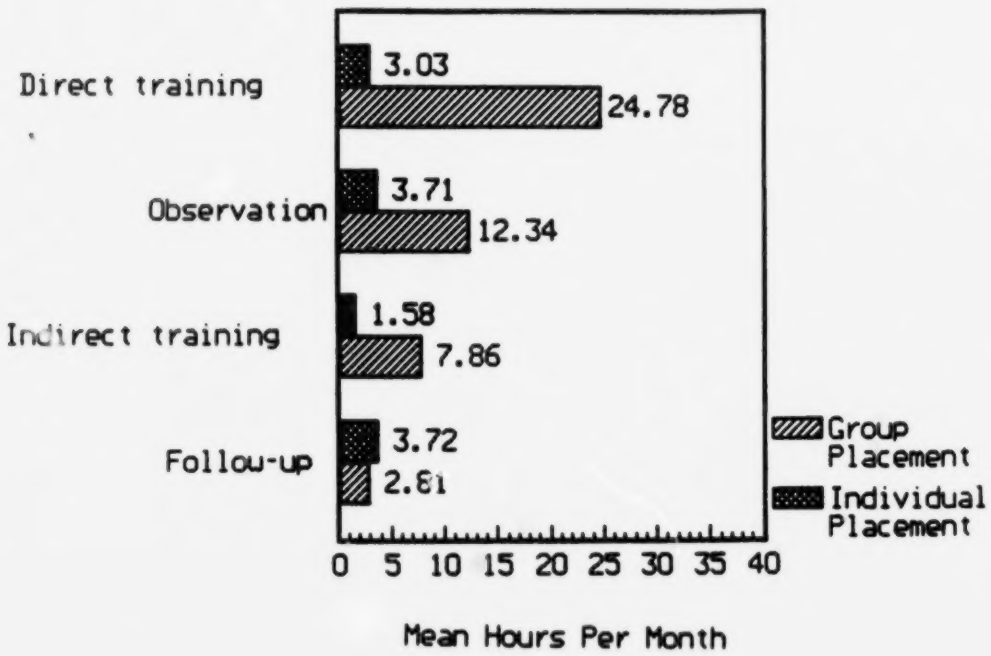
Information on the number of hours job coaches spend on intervention activities is essential for those who are responsible for establishing efficient and cost-effective staffing patterns across job sites. Intervention time includes time spent on specific activities that enable workers to learn their jobs and maintain employment. Intervention activities include direct training--the training of all specific job tasks (e.g., dishwashing, assembly, filing); indirect training--training of all job related skills (e.g., social behavior, travel training, time telling); observation--supervision without hands-on training; and follow-up--trainer activities after the worker has acquired the basic skills necessary for job retention (e.g., employer contacts, scheduled site visits for retraining).

Data analysis was completed on 105 target employees from 16 model programs for the major job coach activities listed above for six consecutive months from October 1986 through April 1987. Figure 1 shows the average hours per month/per worker that coaches spent on the above-mentioned activities in individual and enclave placement models. (An enclave is defined as any placement in which two or more individuals at a

single site were supervised by the same job coach.) Averaged across the two models, the most job coach hours were spent in direct training (X = 20.35 hours).

Among the four activities, job coaches in enclave placements spent the most hours in direct training ($\overline{X}$ = 24.78 hours) and the least hours in follow-up activities ($\overline{X}$ = 2.81 hours). In individual placements, the greatest number of average hours were devoted to follow-up and observation activities ($\overline{X}$ = 3.72 and 3.71, respectively), and the least number of hours involved direct training and indirect training ($\overline{X}$ = 3.03 and 1.58, respectively).

Figure 1. Analysis of job coach intervention time ((N = 105 individuals from 16 model programs).



This 8:1 ratio of direct training activities in enclave versus individual placements is expected since individuals involved in group placements or enclaves usually are those in need of more intensive training time owing to the severity of their disability. A review of Table 1 shows that 93% of individuals with severe and profound mental retardation are served through the enclave model.

These results support the contention of Lagomarcino, Trach, Rusch, & McNair (1988) that generally, lower-functioning individuals who require more direct training and supervision may be most effectively served through a group placement or enclave model. Further study is warranted, which will examine the trend of intervention activities over time.

Job Coach Issues

Data from a survey of 31 Illinois supported employment programs active in January 1987 provide extensive information about job coaches employed in Illinois. The survey was conducted with supported employment program coordinators with the use of an interview format. Information reported included the salary and benefits paid to job coaches compared to those in other direct service positions in the agency, qualifications that agencies required of applicants as well as the work experience and educational background of those they hired, turnover rate, and reasons for termination.

Profile of Illinois Job Coaches

Because the role requires competence in the business world as well as a working knowledge of the social service system and behavior principles, there is no consensus about the qualifications necessary to be a successful job coach. The debate of those responsible for staffing supported employment programs concerns whether the most effective job coaches have social service or business-related backgrounds. In the first instance the individual must learn the priorities and philosophy of the business world in order to establish and maintain relations at the work site, and in the second, the individual must be taught the behavior change strategies utilized in social services to provide effective behavioral programming for individuals with severe disabilities.

Survey results showed that programs are increasingly specifying business experience in addition to experience with persons with disabilities as a condition for employment. The following description provides a composite of qualifications specified in program job descriptions and those of individuals actually hired as job trainers in Illinois.

What types of applicants were program coordinators seeking in terms of educational background and work experience?

Fifty-eight percent of the programs responding required a bachelors degree, and 23% required a high school diploma.

Fifty-two percent of the agencies responding specified one to two years of work experience with persons with disabilities, 3% required only experience in the business sector, and 39% required experience with disabilities as well as experience in business (See Figures 2 and 3).

Figure 2. Job description requirements for educational background of job coaches.

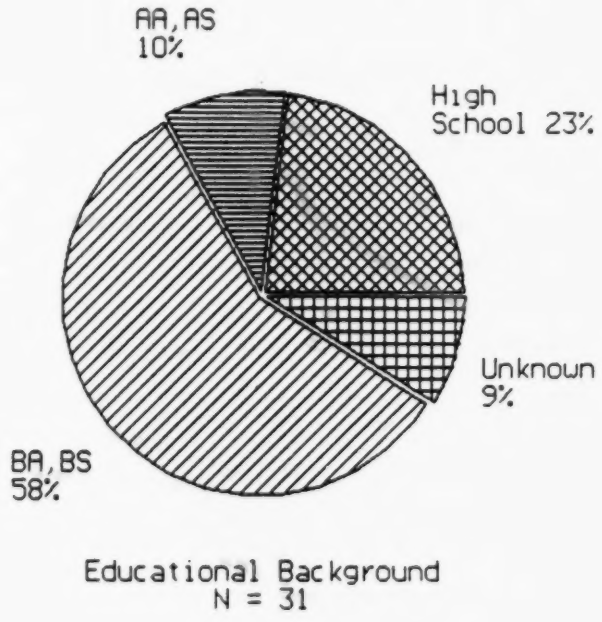
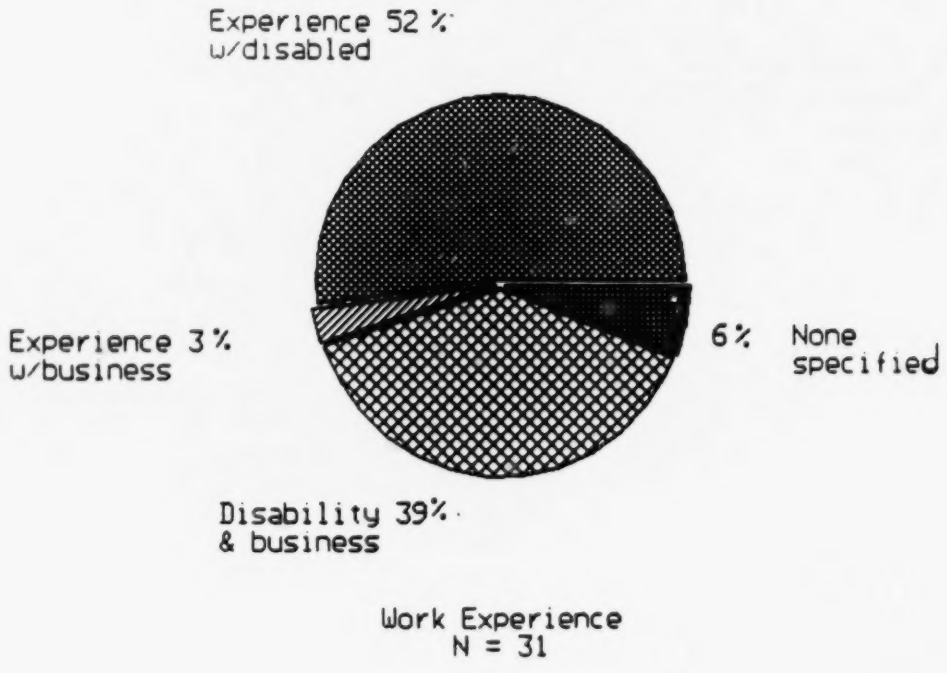


Figure 3. Job description requirements for work experience of job coaches.

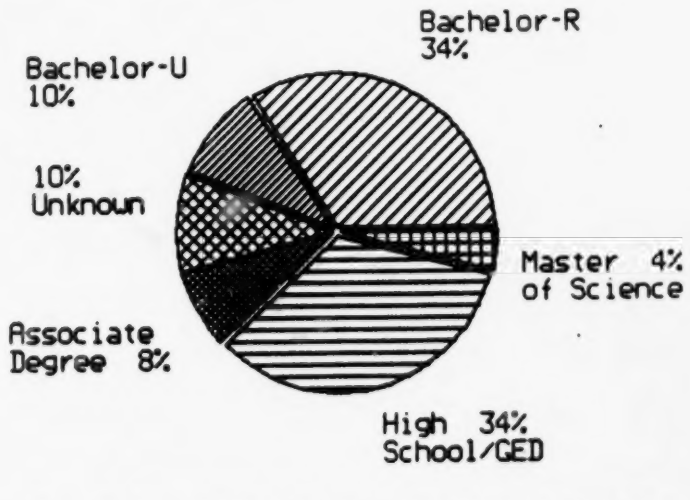


What were the educational and work experience qualifications of individuals actually hired?

Thirty-four percent of the 144 job coaches actually hired had a BS or BA degree in a related field (special education, rehabilitation, psychology, social work), and 4% had a Master of Science degree. Thirty-four percent had a high school diploma. (A small percentage of these job coaches were working on high school equivalent certificates.)

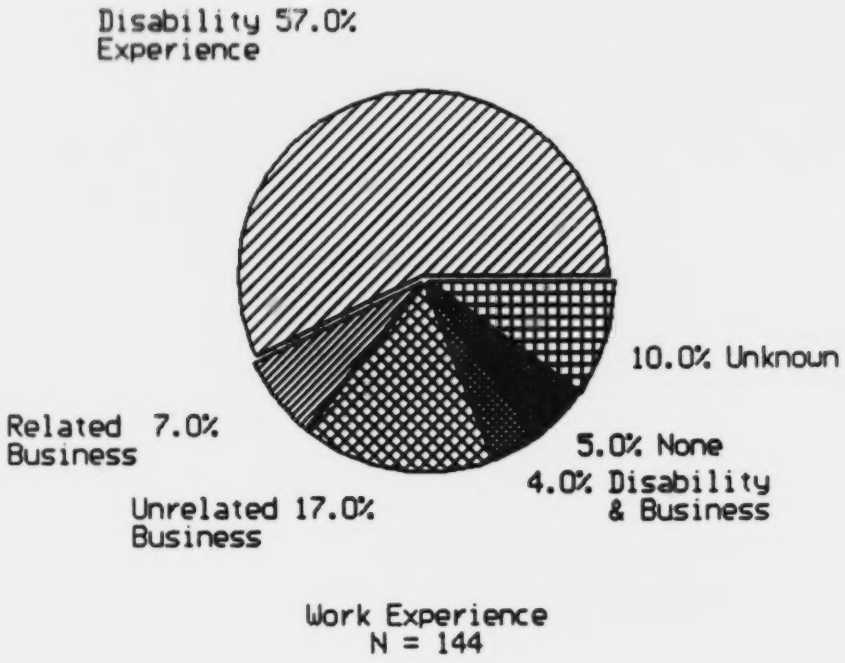
Fifty-eight percent of those hired had experience in working with individuals with developmental disabilities on a paid or voluntary basis. Seven percent had business experience that related to the work they would be performing as job coach, 17% had unrelated business experience, and 4% had a combination of experience in business and social services. Figures 4 and 5 present the work experience and educational backgrounds of job

Figure 4. Educational background of job coaches hired from January 1986 to January 1987.



R - Related Field, U - Unrelated Field
N=144

Figure 5. Work experience of job coaches hired from January 1986 to January 1987.



coaches hired from January 1, 1986 to January 1, 1987. The records of previous experience and educational background of 10.4% of job coaches hired were unavailable.

Salary. Although almost 60% of the 31 programs surveyed required a bachelor's degree and almost 70% required some college hours, results showed that the mean salary for job coaches in Illinois programs was only $12,628 for those without experience and $13,482 for those with experience (see Table 2). However, of those job coaches actually hired in the state, only 34% had a bachelor's degree in a related field and only 10% of those who accepted a position as job coach had a degree in an unrelated field (Figure 4). Job coaches received the same benefit packages as all agency employees except for a few instances in which the job coach was working only part-time.

How does this salary schedule compare with that of other direct service positions within the agency? As of January 1, 1987, 55% of the 31 agencies reported that the job coach's salary was approximately the same as that of floor supervisor or day trainer in the sheltered workshop. Twenty-nine percent stated that the job coach's salary was higher than the comparison group. Thirteen percent of the agencies responding were not facility based and therefore had no comparison group, and the remaining 19% did not respond.

Given the scope of duties and degree of autonomy inherent

in the position, it is recommended that supported employment job coaches be paid on a salary schedule that is separate from that of other direct service personnel who staff programs in sheltered workshops. These findings support the findings of a recent Delphi study on job coach responsibilities, which recommended that the salary levels of supported employment job coaches should be commensurate with traditional professional positions in rehabilitation and education (Cohen, Patton, & Melia, 1985).

Turnover rate. Consistency of training is a crucial factor in measurable behavioral gains of individuals with severe disabilities (Snell, 1983). The high turnover rate among the job coaches is an obvious threat to consistency of

Table 2.

Job Coach Salary Information (1/1/87) Reported by 31 Model Programs

	Starting Salary (no experience)	Top Salary (with experience)
Range	$8,600 - 18,000	$8,600 - 18,000
Mean	$12,628	$13,482
	(SD = $2119.80)	(SD = $2336.60)
Median	$13,082	$13,392
Mode	$13,000 - 14,999	$14,000 - 14,999

Note: The starting salary and top salary were the same for 15 agencies (excluding routine cost-of-living raises).

programming at the job site. Data in Table 3 show that 67 of the 144 job coaches hired were terminated within 12 months; that is, in Illinois supported employment programs, approximately two individuals were hired for every available job coach position. The number of job coaches terminated across individual programs ranged from nine to zero. (A termination refers to any job separation.) Figure 6 describes the stated reasons for termination.

Forty-one of the 67 reported terminations were associated with offers of more money and promotions within the agency

Table 3

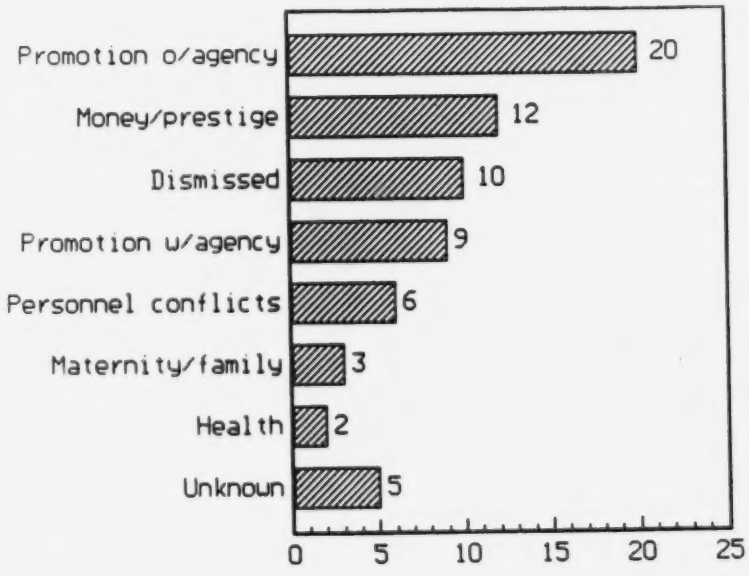
Job Coach Turnover in Illinois Supported Employment Model Programs, January 1986 - January 1987

	Part-time	Full-time	Total
Hired	11	133	144
Working *	7	70	77
Terminated	4	63	67
No. Specified in Grant	8	72	80

* Total number employed at survey (January 1987)

and outside the agency. Given that the majority of reasons for termination were related to money and promotion and that promotion implied an increase in money or prestige or both, it appears that it was difficult to retain job coaches in the field at January 1, 1987 salary levels.

Figure 6. Explanations for Job Coach Terminations, January 1986 - January 1987 (N = 67)



Summary. The position of the supported employment job coach offers a unique blend of responsibilities that require management and interpersonal skills as well as direct training

duties. Because of the scope of responsibilities inherent in the job, the majority of Illinois programs are seeking individuals with four-year college degrees for the position of job coach. Survey results showed that only 44% of individuals actually hired had a bachelor's degree. Thirty-four percent of those hired had a degree in a field of study related to social services.

A turnover rate of approximately two job trainers for every available position over a twelve-month period is of concern to programs striving to provide consistency of programming to individuals who by definition require intensive ongoing supervision. Because the autonomy and community visibility inherent in the role of job coach imply a degree of professional responsibility not present in other direct service psoitions, it is recommended that job coaches be offered salaries that will attract and hold individuals currently interested in professional positions in education and rehabilitation.

Program Evaluation

Degree of Program Implementation

An important aspect of model program development is assessing the degree to which model programs actually implement the characteristics of supported employment that

have been associated with important outcomes, such as average hours worked per month, hourly wage, and both monetary and nonmonetary employment benefits.

In December 1985, field-based technical assistance was begun. Supported employment model demonstration programs in Illinois began to collect implementation data. All technical assistance was based on the evaluation instrument -- Degree of Implementation (DOI) (Trach & Rusch, 1987). During prior visits, model programs (a) were introduced to the instrument and practiced scoring the DOI (Round 1 -- December 1985 to February 1986); (b) collected data on their programs (Round 2 -- March 1986 to April 1986); and (c) had the opportunity to react to the first-year challenge of developing, implementing, and documenting progress in their efforts to establish supported employment in their respective communities (Round 3 -- May 1986 to June 1986). The fourth round of visits (December 1986 to February 1987) was designed to document the growth and stability of the efforts to implement the model and to determine the validity and utility of the DOI as a standard for evaluation of supported employment programs. The following data are based on the fifth round of program evaluation visits, which were conducted in June 1987.

The Degree of Implementation (DOI) Instrument. The DOI instrument is based on the research literature related to national model demonstration development of supported

employment programs (e.g., projects in Illinois, Oregon, Vermont, and Virginia). The intent of this instrument is to provide the Illinois Supported Employment Project (ISEP) with a standard by which to evaluate the implementation of the supported employment initiative and a method for assessing the technical assistance needs of individual model programs.

The DOI is designed to evaluate the process of developing and maintaining a supported employment model. It is used (a) to provide structure for beginning projects to establish supported employment programs by informing them of relevant activities identified through the literature, (b) to analyze the progress of the development of supported employment projects and to document the projects' efforts in relationship to a specified time frame, (c) to investigate and identify possible variables that might facilitate program development, (d) to analyze the proposed model in relationship to actual documented services being provided, and (e) to investigate the relationship of the model to selected outcome variables (e.g., level of worker served, hourly wage, tenure). The instrument lists 28 steps or indicators that are categorized according to five components of supported employment programs: (a) Job Survey and Analysis, (b) Job Match, (c) Job Acquisition and Maintenance, (d) Conjunctive Job Services/Interagency Coordination, and (e) Job Fit. Using written documentation provided by model programs, the evaluator scores the presence

or absence of each indicator by scoring a 0, 1, or 2, or NO (nonexistent), EMERGENT (present but incomplete), and YES (present and complete), respectively. Pre-established written criteria determine the scoring of each indicator and serve as a manual for the administration of the instrument. The overall reliability obtained from the last set of ratings was .89 (Range = .70 to 1.00).

Data collection results. The results of efforts at implementing the proposed model of supported employment are presented in Table 4 and Figure 7. Level of implementation is expressed in quartiles. The first quartile (0 - 25%) is the lowest level of implementation and indicates the extent (percentage of DOI activities) to which a particular project has been implemented. The fourth quartile (76 - 100%) is the highest level of program implementation. Table 4 provides the percentages for each quartile in each round of data collection. The most current data demonstrate that 86% of the projects are in the top three quartiles of implementation and that the most growth has occurred in the second quartile, whereas the third and fourth have remained relatively constant. At this writing 19% of the model programs scored at least 42 out of a possible 56 total points or implemented approximately 21 or more of the 28 supported employment activities (fourth quartile). A slightly lower percentage of model programs (14%) scored at least 14 out of 56 points, or

implemented approximately 7 or fewer activities (first quartile). In the second quartile, 46% of the model programs scored 15 to 28 points implementing between 8 to 14 activities, whereas in the third quartile, 27% of the projects scored 29 to 42 points and implemented approximately 15 to 20 activities. Data on overall implementation over the six-month period indicate that the number of programs implementing more than 50% of the activities has remained stable. Figure 7 shows the steady decline in the first quartile and a

Table 4

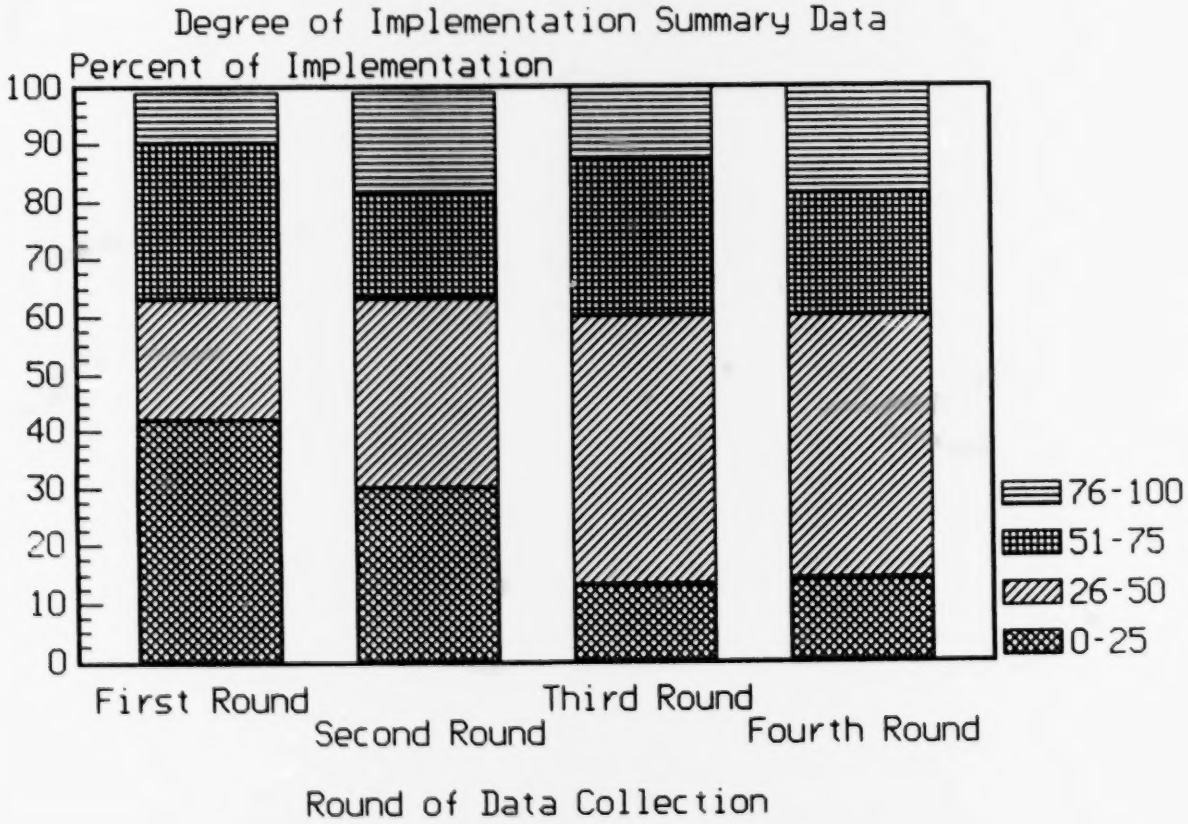
Percentages of Overall Scores by Quartile Degree of Implementation

Quartile	Percentage of Projects at Each Level of Implementation			
	March to April 1986	May to June 1986	December to February 1987	June 1987
1. 0-25% implementation	42	30	13	14
2. 26-50% implementation	21	33	47	46
3. 51-75% implementation	27	18	27	21
4. 76-100% implementation	9	18	13	19

redistribution into the remaining three quartiles over the three rounds of DOI data collection.

The items implemented most frequently are those activities that survey the community (#1), target specific jobs (#3), task-analyze potential jobs (#6), identify requisite skills (#8), assess and observe vocational skills (#12 and #14), and reassess through observation the client's maintenance of vocational skills (#26). This group of activities has remained relatively the same across most of the rounds of data collection.

Figure 7. Degree of Implementation Status



Although the items cited in the previous paragraph represent the core of activities that most projects are implementing, they do not necessarily indicate all of the activities that are associated with successful supported employment programs. There are some important activities that many projects are not implementing; for example, the identification and assessment of social skills are implemented at a significantly lower rate than items related to vocational aspects of employment. Ironically, research literature indicates that persons with disabilities lose their jobs most often because of social skill deficits (Greenspan & Shoultz, 1981). It would seem important, therefore, for projects to conduct social skills assessment and intervention activities. It is encouraging that more social skills assessments occurred in the last round than in previous rounds. It could be that the need for attention to social skills becomes evident as projects gain experience. The most recent data collection indicated a minimal increase in these activities.

Although it had been troubling that there was a lack of systematic training, data collection, and withdrawal, those projects implementing this activity (#16) increased from 37% to 53% in the last 6 months. This increase was a positive sign, but this activity in the Job Acquisition and Maintenance component will need to increase substantially in order to guarantee future success. Because effective systematic

training and data collection strategies are critical to successful supported employment, staff selection and development activities should seek to improve procedures in this area. The low-level implementation of Job Acquisition and Maintenance activities may be attributed to the level of worker being served by the initiative. There is some indication that there is an inverse relationship between the level of worker functioning and scores on the Job Acquisition and Maintenance component of the DOI. This finding has been interpreted to mean that workers with higher IQ scores do not require as much attention to training as workers with lower scores (Trach & Rusch, 1987).

Summary. The results of the DOI data collection indicate that since June 1985 there has been a positive trend toward increasing the implementation of supported employment activities in Illinois. There has been an increase in documented training activities, and those projects in the upper two quartiles have maintained the high quality level of services for two years. It is also encouraging that 18% of the programs improved their degree of implementation status, whereas 11% of the projects experienced some slippage, which seems to indicate that there continues to be some movement to improve model implementation. Overall, there were 19 activities that increased, 8 that decreased, and one that remained at the same level of implementation. Job Survey and

Analysis and Job Match are the most widely implemented components; the remaining three components -- Job Acquisition and Maintenance, Conjunctive Job Services/Interagency Coordination, and Job Fit -- are implemented at consistently low levels. Some possible reasons for nonimplementation of DOI activities include: (a) lack of documentation, (b) inability to implement because of insufficient staff resources or lack of technology, (c) staff resistance to change, (d) level of worker functioning, and (e) philosophical differences.

Model program development will be evaluated during the next year using the revised version of the Degree of Implementation evaluation instrument (Trach, Rusch, & DeStefano 1987). Volume 5 of Supported Employment in Illinois will report upon DOI data collected with the use of the new instrument during the second and third quarters (October-December 1987 -- January-March 1988).

Costs and Benefits of Supported Employment

Research activities on the costs and benefits of employment services for individuals with handicaps have been limited. However, there are two studies that should be examined: First, Hill et al. (1987) used an accounting model (Thornton, 1984) in their cost-benefit analysis of a supported competitive project in Virginia. They determined that

supported competitive employment for individuals with mental retardation cost the government agency/taxpayer $8,171 per consumer while this same group realized a benefit of $15,282 per consumer during a 94-month period. In other words, they determined that for each $1.00 spent by the government/ taxpayer for supported competitive employment, $1.87 was accumulated in benefits. From the consumer's perspective, the benefit also outweighed the cost of the program with a $1.97 accumulated benefit for each $1.00 expenditure.

A second study by Schneider, Martin, Rusch, and Geske (1981) examined the costs associated with training 23 individuals with mental retardation in a competitive employment training program to become food service laborers at a university-based cafeteria. This study compared the benefits (earnings) of extended employment programs (sheltered employment) and competitive employment programs. The findings showed that during the third year of the program, the total earnings exceeded the costs associated with placement. Additionally, the study showed that by the end of the fifth year, earnings associated with the employed workers exceeded the costs required to support the individual service recipient.

To preface a cost-benefit analysis of the statewide initiative, the authors compiled a summary of the reported financial information on individuals who have participated in

the initiative. This information was used to answer several questions such as:

1. What are individuals with disabilities earning both monthly and yearly as participants in supported employment?
2. How many hours have the participants in the supported employment initiative been working each month?
3. How much money has been withheld in taxes from the earnings of individuals in supported employment?

Table 3 summarizes the data for two different periods, August-December 1986 and January-March 1987. From January to March 1987 the average hourly wage was $3.21, and the average number of hours worked per month was 85.5. The average gross income per month was $276.47, and the average monthly withholding tax was $34.76. The average number of hours worked per month decreased from the first reporting period to the second. Additionally, the average monthly wage and average withholding tax decreased over time. In contrast, the average hourly wage increased over time.

In addition to examining the financial data across all individuals over time, the total service models can be compared. The data in Table 6 across all three models for the quarter from April 1 to June 30, 1987 reflect that individuals

Table 5

Average Worker Wages and Withholding Tax (August 1986-March 1987)

	August-December 1986	January-March, 1987
Wage/hour	$ 3.04	$ 3.21
Hours worked/month	95	86
Gross wages/month	$308.58	$ 276.47
Withholding tax/month	$ 45.72	$ 34.76

who work in individual placement models statewide are on the average the highest paid. Enclave workers average approximately the same number of hours each month as the individual placement workers, but the average earnings are lower. Statewide, the mobile work crew model produces the least amount of revenue. Individuals working under this model average the lowest wage per hour, have the lowest monthly gross pay, have the least amount withheld in taxes, and work the fewest hours per month.

Summary. Since the start of the supported employment initiative in Illinois, much has been accomplished toward making the benefits of competitive employment available to persons with handicaps. Program implementation data indicate

Table 6

Average Worker Wages and Withholding Tax According to Placement Model (April 1 - June 30, 1987)

	Individual Placement	Enclave	Mobile Crew
Hourly wage	$ 3.28 (56)*	$ 2.66 (156)	$ 2.62 (21)
Monthly gross pay	$ 301.06 (57)	$ 239.88 (163)	$ 104.39 (21)
Tax withheld	$ 34.66 (52)	$ 30.30 (150)	$ 9.63 (19)
Hours worked	96 (58)	91 (161)	40 (19)

* Figures in parentheses indicate the number of workers for whom information was reported.

that model programs are carrying out greater numbers of supported employment activities than ever before. Although improvement in assessment and training is still needed, program evaluation data indicate that model programs are becoming proficient in job development, job analysis, and job matching activities. Currently, 345 persons are working in the supported employment model programs around the state. These persons work an average of 88 hours per month at a mean hourly wage of $2.73, and earn an average of $253 gross pay

per month. The supported employment program is new, and the challenges facing prospective employees with handicaps, adult service providers, and educators are numerous and complex. However, the initial evaluation of the supported employment initiative gives clear evidence of its success and of progress made toward improving the quality of life for persons with handicaps.

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Supported Employment in Illinois: Three Case Studies

Debbie L. Winking, Lizanne DeStefano, and Frank R. Rusch

A Case Study of Program 1

The Community

Case study 1 concerns a program in a suburban community with a population of approximately 59,000 located 30 miles south of Chicago. Community public relations brochures describe this community as a suburban village that retains its "hometown" atmosphere even though it is only 30 minutes from the nation's second largest city.

The community provides mostly service-oriented occupations; of approximately 28,000 employed residents, only 6,344 are in manufacturing jobs, with the remaining 22,000 in service and service-related jobs. The community's major employer is a large hospital. The other major employers are the city municipal government and area school districts.

At 7%, the unemployment rate in the community is relatively low compared to other midwestern communities. The population is composed primarily of middle class and upper middle class individuals with a median family income of $36,860.

The Agency

Like many other facilities serving adults with developmental disabilities, this agency was founded by a concerned core of parents of children with developmental disabilities. Founded in 1955, during a time when the government was just beginning to fund programs for children with mild mental retardation who were considered educable, 10 associations for retarded citizen families banded together to start their own school. This school served children for whom there were no other programs, children considered "uneducable." On a slender budget, these parents exchanged teaching time among themselves and borrowed any community space they could find to house their school.

From these humble beginnings the agency grew to become a comprehensive agency that serves more than 138 children and adults with developmental disabilities and their families. At the time of this study the agency encompassed a workshop, a 40-bed residential facility, a school program, and a summer camp.

Adult day programs included an adult developmental training unit for individuals with severe and profound mental retardation. About a third of these individuals spent some part of their day in a simplified workshop setting that fulfilled contracts with local businesses.

Vocational programs were conducted at a separate site and

utilized a three-level workshop system. Pay was distributed according to piece rate and hourly wages. These workers punched a time clock and earned benefits and raises. Although this agency's vocational programming was very businesslike in orientation and seemed to place a premimum on client needs and achievements at the adult level, the agency had never been involved in community employment placement before the beginning of its supported employment grant.

The Supported Employment Program

This agency has continued its early tradition of providing services to those individuals considered unservable through its establishment of supported employment. The grant that was initiated in May 1985 has placed nine workers in community employment sites. The IQ scores of workers placed in multiple placements or enclaves ranged from below 30 to 65 with a mean of 44.

The supported employment grant was initiated in May 1985 and employed a program coordinator, a director of vocational services (who, although not employed by the grant, became involved in the direct operation of this particular project), a lead job coach, two full-time job coaches, and one clerical worker.

The supported employment job sites developed by the program as of this report included two enclaves for food

service and bedmaking at a 500-bed nursing home and a somewhat untraditional clerical enclave in a large bank, as well as an individual placement as a kitchen worker in another location of the same bank. The program's placements at the nursing home and the bank had grown in number and in kind as a result of their reputation at the particular sites. For example, two kitchen worker placements which were initially developed at the nursing home had gradually expanded to a total of three kitchen workers and two bedmakers. Although the bedmakers and kitchen workers were placed on separate floors of the nursing home and were responsible to entirely separate management units (dietary and housekeeping), it was the exposure of nondisabled workers to workers with disabilities and successful placements that led to this expansion.

The same pattern of expansion was evidenced at the bank site. An initial individual placement of one maintenance/ kitchen worker had grown to include two clerical positions in statement stuffing and one microfilming position. As the workers in the clerical department proved their mastery of the task involving statement stuffing, their job descriptions were enlarged to include some simplfied computer work using a match-to-sample procedure.

As part of an agency never before involved in community placement, this program had no previous job placement systems established. Therefore, supported employment staff had the

task of creating job analysis and community placement procedures where none existed in the past.

Program staff were interested in evaluation of their efforts. An instrument of supported employment process evaluation, the Degree of Implementation (Trach, 1986), prescribed the monthly use of a worker performance evaluation. Program 1 expanded the concept to include not only a measure of individual worker performance but also a monthly employer's program performance evaluation and client/parent/guardian program performance evaluation. The first instrument was designed to determine the employer's satisfaction with the services provided by the program staff; the second instrument evaluates client and parental satisfaction with the supported employment program in which they are participating. The in-house development and utilization of these instruments confirm that this program was interested in being responsive to the needs of clients, their families, and their employers.

The Demographics of the Job Coach

Although the three programs studied used different titles for their direct service personnel at the job sites, they all had formalized job descriptions. Program 1 employed job coaches, who were required by their job description to have a college degree and/or three to four years of experience with

individuals with developmental disabilities.

The first job coach to be hired had a bachelor's degree in sociology as well as two years of experience in social service as an intake counselor. This person was involved in much of the early job site development of the program and later became lead job coach. The two job coaches who had responsibility for full-time community job sites had high school diplomas. The job coach at the nursing home had substituted in the sheltered workshop in the agency for a short time, and the second job coach had been a workshop supervisor for a number of years. Both had experience in such occupations as waitress, beautician, bookkeeper, or sales clerk.

The Organization of the Position

Job coaches in Program 1 received salaries of $14,000 per year and benefits that were comparable to those of the other employees in the agency, including health insurance and two weeks of paid vacation after one year of employment, progressing to three weeks of paid vacation after six years of employment

Job coaches were directly responsible to the program coordinator. The job was designed so that paperwork was shared. The clerical staff person provided for by the grant completed and coordinated the state reporting forms for individual workers.

Program 1 had a policy of providing job coaches with release time by allowing them to spend one day a week at the office. The program coordinator felt that this policy was beneficial from two vantage points. First, it gave job coaches time to complete paperwork and to plan for quality programming for workers. Second, it provided coaches with an accessible support system at the agency and represented a change from the daily routine of the job site.

The lead job coach served as a substitute for job coaches on those days of the week designated as their released days, as well as for vacation, compensation, and sick days. The lead job coach was also called in to assist in the development of task analyses or to consult concerning particular behavioral problems. For example, one situation with which the lead job coach was assisting the on-site job coach was training the workers to use proper eating skills at lunchtime. The lead job coach stated that her role could be best characterized as problem solver.

In addition, the lead job coach also went to each job site to assist at peak times during the day. She visited the nursing home site between 9:00 a.m. and 12:00 p.m. (a busy time for the bedmakers), and the bank at 12:30. The job coach also received input from the program coordinator and consulting vocational coordinator who visited employment sites on a regular basis each week.

Because job coaches were at the job sites alone, which could cause feelings of isolation, weekly meetings were initiated at which all supported employment staff shared the successes and frustrations experienced at their worksites during the last week. According to one job coach, these meetings provided "a lot of crucial support to the team."

The Role of the Job Coach

Many of the tasks performed by the job coaches were those that were considered traditional duties --- direct service providers to persons with severe disabilities, whereas other tasks are less traditional. Most job coach activities were described during interviews and were verified through direct, on-site observation of the trainers at work. When asked what her job entailed, one job trainer replied, "I am responsible for clients in all aspects of their jobs." Table 1 describes the duties and functions of the job coach.

Task Analysis. Coaches developed the job task analyses by observing as well as actually doing the jobs. One job coach outlined the process that she used to task analyze positions as follows:

> I outline and make notes while learning the job task. If I know the client who is to be placed, I look at the job with that client in mind. I try to

Table 1

Program 1: Job Coach duties and functions

1. Direct training, social and vocational
2. Devise and modify task analyses
3. Conduct job analysis - sequence of skills
4. Paperwork including daily logs, rating task analysis
5. Model tasks for workers
6. Work the job before workers are placed
7. On-site job development
8. Attend all worker staffings
9. Employer advocacy
10. Promote integration at the work site
11. Advocate for workers personal needs
12. Assist in determining worker goals
13. Initiate new programs when necessary
14. Training mobility within the physical environment of the workplace
15. Complete tasks for workers to fulfill agreement with employer
16. Review and modify vocational and social goals
17. Create ways to motivate workers
18. Conduct formal and informal meetings with employers
19. Attend job trainer staff meetings on a weekly basis
20. Create job modifications and adaptions
21. Adapt training to individual differences
22. Retrain workers when necessary
23. Plan and coordinate job club activities
24. Coordinate employers' work performance evaluation forms

visualize him/her working. Then I can think about what method works best for that particular individual. After these steps, I draft the individualized task analysis.

Trainers also reported that they were responsible for the modification of the task analysis over time and across workers.

Direct training. Observations at both the bank and the nursing home sites confirmed that direct training strategies were utilized by job coaches at various times during the day. Some of these strategies included the use of probes, hierarchies of prompts, backward chaining, modeling, and error correction procedures.

According to one job coach, "Direct training is hand-over-hand for at least the first few days. I fade my assistance as they are better able to do the particular task. I back off to see what they can do." This practice of "backing off" to see what steps the worker is able to complete independently appeared to be analogous to the behavior analytic technique of using nonreinforced probes to assess worker performance. However, probes were not taken on a set schedule across time or activities.

When asked how she determined which prompt to use, one job coach replied that it depended on the situation and the worker. Although she felt that less intrusive prompts were

generally preferred over more intrusive prompts, she also added that what was intrusive for one worker may not necessarily be intrusive for another. In the case of workers employed at the bedmaking site, this coach explained that verbal prompts were not always least intrusive. When training one particular worker, she usually used gestural cues or even physical assistance, because he repeatedly became off task at the sound of verbalizations.

The following training segment was outlined by the job coach at the dietary/bedmaking site.

> The first day, training began with one-on-one intensive training. The first step for the workers was "punching in." First I allowed them to try it themselves. If they cannot complete a step I then prompted them with a word or by pointing. In the beginning I do not allow the worker to make the error, I prompt before the error is made [provides pacing prompt]. I also used some modeling because I let the worker who knows the task of using the time clock punch in first each morning. Most workers start out with almost no skills, so I always begin by allowing them to model my actions or one another.

At the bank site, supported employment workers and their co-workers have the task of counting the number of checks in

bank statements. Because the workers are very visible to other bank employees, the trainer must be less intrusive than at the dietary/bedmaking site:

> My training is verbal, because that type of training is most appropriate at the site. I tell them what I am doing with each check, I explain why each step is done. I talk the worker through each step while modeling it. Then it is their turn. I ask a lot of questions as we go along, "What are you looking for?", "What color should the check be?". Only when they feel secure with a step do I fade assistance. Then I observe, and let them observe one another as they train.

Techniques similar to behavior analytic error correction procedures were used at both training sites:

> Sometimes I purposely allow them [the workers] to make an error as I am observing, and then give them the opportunity to find their own mistake. I direct the worker to where the error occurred and allow her to pinpoint it independently.

A type of backward chaining was used although the job coach did not label it as such:

> I would start at the end of the task and only allow the worker to do the part of the task I knew she could do without frustration. [This particular

worker could not complete the initial steps of the statement counting task.] Also, I did not want her to feel information overload in the beginning stages of her training, but I wanted her to receive the reinforcer of completing each envelope of checks.

Furthermore, job coaches were required to provide retraining or additional training to workers whenever necessary. Job coaches reported that retraining might be necessary because a new supervisor was being hired, a new procedure was initiated at a company, or the worker acquiring more responsibilities on the job.

Although verbal reinforcement was used most often, some unique rewards were introduced, particularly at the bank site, which included allowing workers to use the computers and adding machines when a certain number of statement bins had been completed. The computer task involved a simple match to sample operations that were normally completed by nonhandicapped workers in their spare time.

Recording data. Data recording procedures varied with the practical demands of the site. At the bank site, where the daily routine was more conducive to the completion of paper work, daily logs were completed and data checks were taken after each discrete task was completed. In the relatively fast-paced dietary site, task analyses were memorized, and the coach was required to remember missed steps for later recording.

Social and behavioral goals were targeted as they emerged during the first 30 days of employment. Document review indicated that there were no written procedures for social or behavioral goals nor charting of progress toward these goals. According to job trainers, communication of these procedures across staff was verbal at weekly job trainer meetings.

Maintenance checks. To assess for maintenance of skills at the nursing home site, the job trainer would observe the workers from just outside the room. Maintenance techniques at this site also included turning partial supervision over to the regular supervisor.

Other programming. Job coaches were also responsible for any other programming that might allow workers to become more independent in their jobs. Tasks identified as trained by job coaches included independent living skills such as using the phone at work, writing checks, mobility training such as going up and down stairs, independently entering the building, and using the elevator. Community job sites required that work skills be the first training priority of the job coach. Therefore, ancillary skills were trained during slow times on the job or before or after work.

In teaching one worker to come downstairs independently to the operations area of the bank each morning, the coach used a strategy that was similiar to a changing criterion technique. At first the job coach accompanied the worker on the elevator.

Next, the worker had to locate the correct button on the elevator with a prompt from the job coach in order to receive the reinforcer. Later a reinforcer was only earned if the worker independently located the correct button on the elevator. The worker was reinforced for successive approximations of independently reaching the work area, until she was finally riding the elevator and locating her desk without any job coach assistance. Because these programs had no written training plans or data collection procedures, the job coach noted individuals' progress anecdotally in daily logs.

This effort to train mobility within the building also utilized co-workers. The security guard was targeted by the job coach as an environmental cue. His presence by the elevators in the mornings prompted workers as to the proper time to go downstairs to their work area.

On-site job development. This activity essentially placed the job coach in an advocacy role to employers at their site. Job development efforts may be focused on the individual worker or the program in general. One job coach described how she was able to move from one placment in a kitchen/maintenance situation to multiple placements in other areas of the organization:

> What I did was get friendly with the supervisors of all units as they came through the cafeteria line. I would get "nosey" and learn what jobs were

like in their units. Then I would see which parts of the jobs my clients could perform.

Paperwork. According to the job coaches, job site management required a great deal of paperwork and this aspect of their jobs they enjoyed least. In some cases they felt that it detracted from the time available for direct training of the workers.

Initial paperwork completed during the first month of employment included writing the goals and objectives for the habilitation plan. The goals were reviewed every couple of weeks and signed off by the job coach as workers acquired skills. Formally, the goals were reviewed quarterly in an interdisciplinary staffing that the job coach was required to attend. Daily paperwork was said to include data checks, daily logs, and training time sheets. Other professional responsibilities. Job trainers were responsible for contacting parents and attending all interdisciplinary staff meetings involving their workers. The trainers were also responsible on a rotating basis for conducting monthly job club meetings for all clients in supported employment.

A Case Study of Program 2

The Community

This case study was conducted with a rural program in central Illinois. Program 2 was located in a town of approximately 5,600 inhabitants which was not accessible by interstate highway. Although the community was categorized as agricultural, there were five small industries in the area, including three electronics manufacturers, a custom metal products manufacturer, and a printing company. Of these, only the printing company, the largest employer in the community was unionized.

Another large employer in the community was the county association for retarded citizens, with which this particular case study was conducted. This county nonprofit organization employed from 100 to 120 persons.

The county Chamber of Commerce data indicated almost full employment, with a county-wide unemployment rate of .6 %. According to the authorities, this figure may have been slightly misleading in that a certain percentage of those unemployed in the community and county were employed in a larger neighboring city. These individuals were drawing their unemployment from another county and so were not counted among the county rolls of the unemployed, even though they were residing in the county. Most of the town residents were

lower-middle to middle class, with a median family income of $18,107.

The Agency

The adult service agency was part of the county association for retarded citizens and was a comprehensive agency providing vocational, educational, and residential services for individuals with developmental disabilities. Agency personnel as well as co-workers of suppported employment workers reported that the community in general had a positive attitude toward activities of the adult service agency and individuals with disabilities. Agency personnel felt that this favorable climate was the result of the groundwork laid by a well-respected community member who served as county superintendent of schools for many years.

The community attributes much of the early development of adult services for persons with developmental disabilities to the efforts of this superintendent. In the early 1950s, this superintendent was acutely aware of numerous children throughout the county who had been excluded from classrooms because they were disruptive or retarded. He became instrumental in establishing the first school and day programs for adults with mental retardation.

In 1973, during the era of deinstitutionalization, a community residential facility was established, bearing the

esteemed superintendent's name. The facility was the second of its kind in Illinois. The residents of the town pledged their support for the movement of recently deinstitutionalized individuals to a residence only six blocks from the community's small downtown area. Donations and contributions from the townspeople amounting to $120,000 paid for the portion of building costs not covered by government grants.

In these early efforts to establish a community residential facility during a time when the warehousing of persons in large institutions was still common practice, one can see a town interested in the quality of life and independence of all its citizens, including those with developmental disabilities. By the time of this study, an apartment training program had also been established in the community.

Current vocational services included a sheltered workshop which housed a Day Training I and Day Training II program. Clients in Day Training II worked to fulfill contracts and were paid according to their productivity. Skills training classes were also part of the clients' daily routine.

Although this agency had never been involved in community employment placement before the initiation of the supported employment grant in May 1985, agency personnel were confident that the community would accept the program. According to one employee of the agency, "To this town, employing people

with disabilities through supported employment is just a natural extension of their efforts to support the establishment of the residental facility a few years ago."

The Supported Employment Program

The grant employed a program coordinator and two full-time and one part-time job coaches. The job description required that job coaches have a high school diploma or one year of experience with persons with developmental disabilities.

As part of an agency never before involved in community placement, this program had no established job placement systems. Therefore, the supported employment staff had to create job analysis and community placement procedures where there were none in existence.

Because of the lack of availability of community employment sites suitable for multiple placements during the early stages of implementation, this program began with individual placements and gradually moved to serving clients though multiple placement sites. Although other individual placements were made, this programs's first multiple placement sites were established in September 1986, just five months before this study.

These multiple placement sites included janitorial enclaves in a survey equipment warehouse, a county health department building, and a laundry and janitorial site at a

mid-sized nursing home in a neighboring town. In total, 16 workers were placed in these enclaves and individual placement sites. For the purpose of this study, two of the three multiple placement sites established were analyzed in depth, the janitorial site at the health department and the laundry site in the nursing home. IQ scores of workers placed in multiple placments ranged from 18 to 55 with a mean of 42.

The Demographics of the Job Coach

Seeking a title that they felt would more accurately describe the complex duties performed by the direct service personnel in supported employment, this program chose to give their job trainers the title of "vocational specialist." The two full-time vocational specialists (hereafter referred to as job coaches) employed by the program since its inception in 1985 possessed high school diplomas. One of these trainers had previously worked in the residential facility and several factories and had operated her own business. The other had also worked in a factory in the community.

The most recently hired part-time job coach had a bachelor's degree in psychology and business experience in a retail shoe store. The position as job coach was her first opportunity for work related to her major field of study.

The Organization of the Position

Job coaches in Program 2 were paid $4.60 to $4.75 per hour, which amounted to a yearly salary of approximately $10,712. Benefits were the same as those for all employees of the agency, including health insurance and one week of vacation the first year of employment progressing to two weeks after two years of employment, and double time pay for all holidays worked.

Job coaches were directly responsible to the program coordinator. Two of the job coaches were site managers of multiple placement sites, and the third coach had the responsibility to provide training and follow-up to all individual placement sites. Because many of the workers at individual placement sites had begun working independently, this trainer position had greater flexibility of hours, as well as a variety of duties across the worker week, such as training workers in the area of money management skills at a local bank.

Supported employment client work schedules allowed full-time trainers approximately one to three hours daily to return to the office for program planning and administrative activities. This was essentially the coaches' only time at the adult service agency. Because of employment site scheduling, the part-time job coach was required to complete these duties at the actual employment site.

As the only other staff person on the supported employment grant, the program coordinator filled in at the job site to

allow the job coaches release time in the event that there were no substitutes available. The program coordinator had established bi-weekly meetings for supported employment staff. These meetings were the means by which job coaches were able to discuss worker behaviors, issues concerning site management, and employer and consumer satisfaction, as well as administrative concerns and agency business.

Job coaches also reported to the program coordinator on an informal basis about the status of the employment site upon returning to the office each afternoon or the next morning, depending on work schedules.

The Role of the Job Coach

Because of the lack of public transportation in this rural community, transportation became one of the first activities stated by job coaches as an integral part of their job duties. Although direct training and advocacy were also seen as crucial job coach activities, if transportation duties were not a part of the position description of the coach, supported employment would not have been a reality in this particular community. (See Table 1 for a description of job coach duties).

Job analysis. In all instances the job coaches reported that they had performed the job themselves before they began training clients. When establishing a new site, a sequence of job skills was compiled through observation of co-workers, as

Table 1

Program 2: Job Coach Duties and Functions

1. Transport workers to and from work
2. Devise task analyses, modify task analyses
3. Conduct job analysis - sequence of skills
4. Data checks using task analysis
5. Graph data obtained from task analyses
6. Daily logs, behavioral checklists, state department reporting forms
5. Learn worker history
6. Model tasks for workers
7. Work the job before workers are placed
8. Attend all worker staffings
9. Coordinate services with agency case counselors
10. Employer advocacy
11. Promote integration at the work site
12. Advocate for workers personal needs
13. Write individual habilitation plans
14. Initiate new programs
15. Conduct time studies of job tasks
16. Complete tasks for workers as necessary to fulfill agreement with employer
17. Review and modify vocational and social goals
18. Create ways to motivate workers
19. Meet with employers
20. Attend job trainer staff meetings on a bi-weekly basis
21. Create job modifications and adaptions
22. Assist in developing and modifying forms
23. Adapt training to individual differences
24. Retrain workers when necessary
25. Plan and coordinate job club activities on a monthly basis
26. Assist with presentations about the supported employment program to various community groups
27. Assist in the development of brochures and video presentations on supported employment.
28. Train related skills, such as personal banking

well as actually doing the job the workers were expected to fulfill.

Task analysis. This program stressed the use of the task analysis as a training and assessment device. According to job coaches, the task analysis was a tool that allowed them to make data-based decisions regarding worker programmming and an aid in the modification of goals and objectives.

The system that was devised required job coaches to rate workers on a discrete number of trials using the task analysis. The task analyses yielded percentages for each task and were averaged over the number of trials. The percentages were graphed so that the trainer would have a visual description of the worker's progress over time. Using this procedure, the trainer could then empirically determine whether a worker had reached the criterion specified in the individual habilitation plan, (e.g., the task of folding flat sheets was met when a worker reached a criterion of 95% for 30 consecutive working days).

These job coaches felt that this use of the task analysis allowed them to make confident decisions regarding a worker's performance. One coach commented regarding the use of the task analysis as merely a job description, "How can a trainer be sure that a worker has acquired a skill or met an objective if task analyses or checklists that measure behavior are not used?".

Direct training. Most direct training at the county health

department janitorial site and the nursing home laundry site involved modeling on the part of the job coach. Comprehensive behavior programs had been established on site that were also utilized in the residential setting. Many workers had checklists of behaviors targeted for reduction. The lists included such behaviors as staring, inappropriate greetings, and verbal outbursts when criticized. If the worker refrained from, or kept behavior at an acceptable level, he received money for a cup of coffee in the morning on the way to work.

Consequences varied, depending on what particular activity was most reinforcing to individual workers. One unique reinforcer that was used allowed the worker extra money budgeted for the week, which was allotted when the job coach took the worker to the bank to deposit his or her pay check. Since the job coaches were responsible for the tasks of transporting workers to their jobs and assisting them with banking skills, they were able to provide these consequences consistently.

One job coach was observed employing the Premack principle of using a preferred or high frequency behavior to reinforce a low-frequency behavior as a motivational tactic with workers. The job coach explained her use of the technique in a later interview:

> For example, I have a certain worker who enjoys taking trash outside to the dumpster. I have the worker complete a short disliked task, and tell him

that when this task is finished he can take out the trash. Over time I can increase the length of the undesirable task.

Verbal reinforcement was administered sparingly, and no definite schedule was used at community job sites. Workers at both the laundry site and the janitorial site seemed to operate on a maintenance-level schedule of reinforcement.

Paperwork. Without clerical assistance specified in the grant, all supported employment client paperwork was assumed by job coaches. These responsibilities included developing and charting data obtained from task analyses, using behavioral checklists, writing daily logs, and providing monthly reviews of worker progress, time logs, and state department client data forms.

Advocacy. At both the laundry and janitorial sites, employer advocacy was cited as an important duty of job coaches. Examples included working with employers to get them to handle minor rule infractions with workers, or to interact directly with the supported employment workers instead of taking their comments or complaints to the job coach.

Other types of advocacy activities performed by job coaches included working with the residential placement to supervise diets of some clients, providing individual case counselors with information about specific client personal needs, and even in some instances assisting workers in purchasing Christmas presents.

Maintenance. The job coaches in Program 2 felt that promoting independence on the part of workers was essential to maintenance of skills on the job, including instituting permanent prompts that would allow workers to perform some skills in the absence of the trainer. At the janitorial worksite at the Department of Public Health, the sign-in sheets that all employees were required to complete were enlarged and examples given so that certain workers could match to sample and write in their own hours. This task would otherwise have been completed by the job coach indefinitely, with no worker involvement.

Other professional duties. Job coaches were required to be present for all staffings and to coordinate services with the agency-wide system of individualized case coordinators. In program 2, job coaches were required to develop the skills necessary for public speaking and writing through participation in a series of public relation activities for the program. These included participation in agency, school system, and community inservices, and involvement in the creation and design of two video presentations featuring supported employment workers at their jobs. Job coaches commented that these activities made them feel more like professionals and gave them a sense of ownership in the program. Job coaches in Program 2 felt that these responsiblities should be a standard part of the job coach's job description.

A Case Study of Program 3

The Community

Case study 3 was conducted in a central Illinois city with a population of 150,000. The city provided primarily service-oriented occupations, some of which were associated with the historical tourist attractions in the locale. Service occupations are defined as those that produce a service rather than goods and include such positions as waiters, restaurant managers, taxi drivers, health care workers, and retail salespersons. Average family income was $24,000, and the unemployment rate within the general population was stable at 5.6%.

The Agency

The adult service agency with which the supported employment program was affiliated was part of an association for retarded citizens founded in 1951. This agency offered infant programs for children from birth to three years of age as well as a comprehensive vocational and residential program for adults with developmental disabilities. Agency programs served a total of 300 children and adults with disabilities in a two-county radius.

Residential programs offered by the agency represented a comprehensive array of living alternatives, excluding respite

care, group homes, adult group homes, supported living arrangements (SLA), a licensed Community Living Facility with a capacity of 20, and an Intermediate Care Facility (ICF/DD) housing 40 residents.

Vocational services included Day Training I and Day Training II programs and regular work programs operated in-house. In addition to these in-house programs, the agency also operated a janitorial training program for competitive employment which was based in the community. The agency did have some community placement experience through the janitorial program before the initiation of the supported employment grant.

The Supported Employment Program

At the time of this study the supported employment program employed a program coordinator, part-time vocational evaluator/job developer, three full-time and two part-time job coaches, and a clerical staff person. The original terms of the grant had specified only four full-time job coaches. However, through the efforts of an executive director committed to community employment, outside funding sources were sought for part of an additional half-time job trainer position. This additional position allowed for greater flexiblity in the initial selection of job sites.

Program 3's first sites were established in June 1986.

There were seven multiple placement sites operational at the time of this writing, including a food service at a large community college, two fast food establishments (Popeye's Chicken and Pizza Hut), a laundry service for elderly persons that used a mobile work crew model, and two separate clerical enclaves in a well-established insurance company. The insurance company and community college food service sites were chosen for intensive study.

A total of 20 individuals were placed at all sites. The IQ scores of these workers ranged from 28 to 55.

The insurance company and the food service sites paid workers based on their productivity. In both cases the employer held the subminimum wage certificate on the supported employment workers. The program coordinator had advocated this arrangement because it allowed the employer to pay the workers directly, instead of through the agency, which is necessary when the agency holds the certificate. Workers can then readily see the link between their employer and their paycheck. Furthermore, this method was considered more normalizing for workers placed in community jobs.

Program 3 had experienced the development of new community employment sites as a result of the success and good reputation at previously established sites. The program coordinator stated that 40% of current sites were initiated by the employers themselves who had heard about the program from

fellow employers. For example, a second Popeye's Chicken site was established in a neighboring town because the employer had heard about supported employment from another store manager and wanted a similar program in his restaurant.

The coordinator of Program 3 felt that continued successes at community sites would make the task of job development increasingly easier for his staff.

The Demographics of the Job Coach

The job description for this particular program specified that community supervisors (hereafter to be referrred as job coaches) were required to have a high school diploma and one to two years experience with persons with developmental disabilities. Job coaches managing the sites that were observed in this study were interviewed about their work and educational backgrounds.

The full-time job coach responsible for the community college fast food site was laid off from a position with the railroad. He had a high school diploma and had had experience with persons with developmental disabilities through a group home that he and his wife managed. The part-time coach at the same site had not finished high school and had experience in various community jobs. The full-time site manager of the insurance company enclave had a high school diploma and had experience with persons with developmental disabilities

through her previous job with the agency-run intermediate care facility.

The Organization of the Position

Job trainers in Program 3 were paid an hourly wage of $4.10, which is equivalent to a yearly salary of $8,528 per year. Benefits provided to job coaches were the same as those for all employees in the agency and included medical leave, paid holidays, and medical insurance.

The job coaches were directly responsible to the program coordinator. Because the role of job coach was still being defined within programs, and because of the degree of competence and autonomy that was essential at the job site, the coordinator of Program 3 had emphasized the evaluation of job coordinator performance. He also felt that job coaches would be better equipped to do their jobs if they knew exactly what was expected of them in every facet of their position.

Toward better communication of job responsibilities, the program coordinator, with job coach input, had created an instrument that delineated each duty of the job coach and broke duties down further using a three-point competency system. (For example, the competency levels for the duty of "completes productivity studies," included: (a) performs productivity study on each item of the task analysis monthly; (b) performs productivity study on most items in the task

analysis monthly; and (c) does not perform productivity study.) These competencies were rated and individually discussed at staff meetings.

The program had also developed an instrument that delineated program coordinator duties and responsibilities. This instrument allowed job trainers to understand better their program coordinator's role and functions in the process of providing supported employment services.

In Program 3 job coaches spent all of their working day at community job sites. As in many supported employment programs, work site schedules dictated job coach flexibility. In this particular program, because of the hours of operation of community placement sites, there was no designated time for job coaches to return to the office for the completion of paperwork or program planning. A system was established so that trainers could receive the replacement forms that they needed to complete task analyses and paperwork at their work sites. The clerical staff person hired with grant funds coordinated and disseminated all task analyses and all data forms required by the state funding sources. She visited each employment site on the last day of the work week to replenish job trainer supplies.

Because job coach time at the agency was at a premium, the coordinator of Program 3 had instituted biweekly/monthly supported employment meetings. All supported employment

program staff were required to attend. For the job trainers, these meetings provided opportunities for sharing job site concerns about workers and employers.

The Role of the Job Coach

In Program 3, direct training and productivity were among the duties emphasized by job coaches in interviews. Although the list is not extensive, the following sections elaborate on some of the various duties and activities performed by job coaches employed by Program 3 (see Table 1).

Direct training. Training required that job coaches adapt to a certain degree to the atmosphere of the particular site. At the community college food service site, the work pace was fast and supervisor intrusion common. At this site, physical assistance and directive verbal prompts (i.e., "Move the dishes here," "Clear that table") were considered acceptable and more typically used by "regular" workers. At the insurance company site, where the environment was more sedate and businesslike, modeling and nondirective verbal prompts (i.e., "What's next?" or "What do you do when policies are finshed?") were used frequently.

The pace of the food service site was too rapid initially for some workers. The job coach explained how he modified training by limiting demands placed on one worker to allow him to succeed in the dishroom:

Table 1

Program 3: Job Coach Duties and Functions:

1. Direct training, social and vocational
2. Devise task analyses, modify task analyses
3. Conduct job analysis -- sequence of skills
4. Conduct time studies of job tasks
5. Complete paper work including daily logs, rating task analysis, Illinois reporting forms
6. Model tasks for workers
7. Work the job before workers are placed
8. Attend all worker staffings
9. Employer advocacy
10. Promote integration at the work site
11. Advocate for workers' personal needs
12. On-site job development
13. Initiate new programs
14. Train mobility within the physical environment of the workplace
15. Complete tasks for workers to fulfill agreement with employer
16. Review and modify vocational and social goals
17. Create ways to motivate workers
18. Meet with employers both formally and informally
19. Attend job trainer staff meetings biweekly or monthly
20. Create job modifications and adaptions
21. Assist in developing and modifying forms
22. Adapt training to individual differences
23. Conduct monthly DORS meetings concerning individual workers
24. Retrain workers when necessary

Bill was overwhelmed by the task of a sink full of dirty dishes because although he was 50 years old, no one had ever expected a great deal from him in the past. To cut the task down, I moved everything away from the dish area except five dirty pans which I cleaned as Bill observed. Then I set five pans in front of Bill and had him clean them. Everyday I increased Bill's work load until he gradually became less intimidated by task demands placed on him.

Reinforcement schedules were lean. At the insurance company site, individuals worked for as long as 25 minutes without verbal reinforcement or attention from the coach. Coach-initiated reinforcement was administered even less frequently at the food service work site where workers were stationed in varous areas of the dishroom and cafeteria.

Coaches stated that although reinforcement was more frequent during initial training, verbal praise was generally only given when the worker self-initiated or completed tasks he or she usually did not complete without prompts from the job coach. Whether planned or unplanned by the job coach on site, this use of reinforcement may have been beneficial in that it approximated more closely the type of reinforcement that was present in the day-to-day work environment of "normal" workers.

Promoting integration. At the insurance company site, the

job coach promoted integration by setting up situations in which her workers had to interact with co-workers to gain information or satisfy a need. She reported the situation as follows:

> Initially, I set it up so that my workers had to ask questions of other workers. For example, when Cynthia goes to the mail-sorting station, instead of giving her a paper and pencil to tally incoming mail, I tell her, "Well, if there is no pencil here, I guess you will have to ask someone if you can borrow one." In the beginning, she would rather walk all the way back to our desks than speak to another worker. Now she is starting to interact.

Similiarly, at the insurance company, initially all work was brought directly to the supported employment work area. The job coach then arranged with co-workers to leave work to be completed on their desks so that the supported employment workers themselves would have to make rounds on the floor to collect policies to be sorted, documents to be copied, and other work materials.

Although no specific integration strategies were used at the community college site, integration was considered defacto because of site characteristics. Because of work load, the six supported employment workers were required to take their breaks and lunches at different times during the day. Similarly, because of seating arrangements and lack of table space in

the cafeteria, workers ate lunches with college students or with other co-workers.

Recording data. Because the workers at both the food service and insurance company sites had acquired most of their job tasks, increasing productivity had become a major focus of data collection. Job coaches were required to conduct time studies on all items on the worker's task sequence on a monthly basis. These time study figures were reviewed, and worker goals were adjusted accordingly.

In addition to the purpose of adjusting goals, job coaches also stated that productivity studies had to be completed in a timely and accurate fashion to insure continued employer satisfaction. In the initial contract with the employer, the supported employment program agreed to supervise minimum wage cerificate paperwork for the employer if the employer would agree to be the bearer of the certificate. Because employers at these sites held minimum wage certificates on supported employment workers, they were subject to audit by the Department of Labor.

On-site job development. Job coach activities related to job development at the site and job enhancement were promoted by the program coordinator as well as the agency executive director. A cash incentive had been proposed to be awarded to any job coach who was responsible for the renewal of a supported employment contract with current employers for the next fiscal year.

On-site job development and job enhancement activities varied across sites. According to one coach, the nature of these activities was dependent on worker abilities and job site characteristics. At the insurance company site, the job coach had been involved in such activities as working with the company to get the two workers in the afternoon clerical site moved to more appropriate and integrated office conditions.

At the community college food service site, the coach worked with the employer to increase one worker's duties and to integrate him into the the mainstream of the food service establishment. The goal of the coach was to have the employer hire this individual as a regular employee of the company.

Paperwork. Paperwork completed by job coaches in Program 3 included State Department reporting forms, needs and concerns forms on each worker weekly, copies of workers paychecks biweekly, daily task analysis and contact sheets, productivity forms monthly, time charts of the work day of individual clients for three days, productivity studies, and monthly summaries on each worker for Department of Rehabilitation meetings.

Other professional responsibilities. Although the greater part of these coaches' work day was spent in direct training of workers with disabilities, other professional responsibilities were also included in the position. Job coaches were required to conduct monthly meetings with local Department of Rehabilitation counselors concerning each client.

Coaches also had to make weekly contact with parents or residential personnel regarding the status of the worker in supported employment.

Formal and informal contacts with employers had to be maintained. In some cases formal contacts required the job coach to obtain a monthly written statment of employer satisfaction on each worker.

Finally, although job coaches were not responsible for the actual transportation of workers in this urban setting, they were responsible for making telephone contact with the transportation operator when work schedules warranted changes.

Key Stakeholder's Perceptions of Job Coach Duties

A major role of the job coach is often that of diplomat and communicator between the many groups involved in the supported employment process. Therefore, this analysis would not be complete without a discussion of the perceptions of these other stakeholders about the role and duties of the job coach.

Perceptions of others involved in supported employment have been grouped according to role/position and have been discussed across programs. Responses of stakeholding groups involved in supported employment have been aggregated across all three studies for two reasons: (a) general perceptions within groups did not vary greatly across programs, and (b) summarizing perceptions was a useful tool to aid in the future planning of programs.

Program Coordinators

Adjectives used by program coordinators to describe the role of job coach on site included: advocate, support system, troubleshooter, boss, and communicator. Because the program coordinators were directly involved with supported employment, their list of basic job duties closely paralleled duties stated by the job coaches (see Table 1). Frequently cited duties included directly training workers in social and

Table 1

Program Coordinator Perceptions of Job Coach duties

1. Train in vocational and social skills
2. Complete daily logs
3. Transport workers
4. Participate at all worker staffings
5. Learn the job that the supported employment workers will perform
6. Write individualized task analyses
7. Modify jobs, (e.g., color coding)
8. Using task analyses to obtain data on daily worker performance
9. Advocacy
10. Teach workers how to think through their jobs every day
11. Communicate with all groups
12. Contact parents on a weekly basis
13. Calculate productivity monthly
14. On-site job development to increase worker duties
15. Make data-based decisions when revising programs
16. Deal with behavior problems on site
17. Write individual habilitation plans
18. Plan and coordinate activities for worker job club
19. Orient workers to safety procedures
20. Finish work to fulfill agreement with employers
21. Call the office daily to report on activities at the job site
22. Write notes to families
23. Plan activities for job club
24. Orient new workers to the physical environment in which they will be working
25. Teach safety procedures at all sites

Important competencies listed by program coordinators:

1. Flexibility
2. Good communicator
3. Coping skills
4. Ability to manage stress
5. Proficient at written communication
6. Degree of confidence of own skills
7. Ability to take initiative

vocational skills, completing daily logs, writing individualized task analyses, and advocacy.

Job coach competencies. Since they worked closely with job coaches as direct supervisors, program coordinators were able to add some general qualities that they felt were essential for direct service personnel in supported employment. First, they stated that a degree of flexibility and openness to change were crucial qualifications for job coaches. Flexibility was essential, they felt, because effective job trainers must juggle many responsibilities (e.g., one minute they must provide physical assistance to a worker learning to sweep a floor, and the next they must meet with the vice president of the company regarding performance evaluations of workers).

Another example of job coach flexibility concerns the balance between adhering to procedures and satisfying employer needs. According to one program coordinator:

> In order to satisfy the employer, sometimes systems need to be abandoned or modified. For example, when the food service manager says he needs onion rings, he needs them immediately, not in two weeks when the task analysis is finalized and typed. The job coach cannot be thrown off guard by these types of changes.

Program coordinators stated that coping and stress management skills were necessary for job coaches; that is, they

must be able to take and use constructive criticism from employers and supervisors.

Deficits and training needs. Although coordinators of the three programs studied were generally positive about the daily performance of their job coaches, they also stated some deficits. Program coordinators felt there was a definite need for formalized inservice courses for job coaches. This group stated that courses and possibly some type of credential for job coaches would increase their knowledge and effective use of behavior change techniques with workers.

Program coordinators also cited a perceived lack of self-confidence on the part of job trainers. One coordinator stated, "I believe that job coaches are stifled by a lack of knowledge of techniques. They are intimidated and feel that we [their supervisors] know so much more than they do." A common complaint was that job coaches often did not have the self-confidence to try a behavior modification technique for long enough to allow it be effective.

Because job coaches necessarily have a high degree of autonomy, one coordinator felt that increased confidence would allow job coaches a greater decision-making role within the program. "I like to use a participative management style with employees, but it is difficult if job coaches will not take the initiative and have faith in their own skills." Program coordinators felt that the confidence to try new techniques

would go hand in hand with the establishment of formalized inservice courses for job coaches.

Other expressed needs concerned developing writing skills necessary to complete adequately job coach logs and to correspond with employers and a general professionalism that allows effective communication with employers and parents.

Summary of program coordinator perceptions. Job coach and program coordinator lists of job coach duties were quite similar, which may result from two factors: (a) In order to provide a new, different employment option, a high level of cooperation and communication was necessary between management and direct service personnel; (b) Coordinators made clear their expectations clear to job coaches. In practice, the program coordinator of one program created a task analysis delineating job coach duties, and in all three programs, coordinators had some degree of direct knowledge of job coach duties because they themselves had provided substitute job coach services.

Program coordinators in the three programs studied expressed overall satisfaction with the performance of the job coaches on site. However, they also expressed areas where job coach skills needed to be enhanced, including the need for a working knowledge and consistent use of applied behavior analysis techniques, formalized training for job trainers, increased competence, and better written and oral communication skills to enhance interactions with parents and employers.

Employers

To employers, the presence of a job coach on site represented a high level of commitment and attentiveness to their production needs on the part of the social service agency. When asked what their greatest concern was initially upon being approached in regard to the supported employment program, all employers responded that it was on-site supervision. In fact, some employers who had previous experience with programs for persons with handicaps that did not provide ongoing supervision stated that the only reason they agreed to the supported employment program was because job coach involvment was promised.

Other concerns of employers were employee safety, getting along with co-workers, and communication between themselves and individuals with substantial handicaps. However, employers commented that these secondary concerns became largely irrelevant once the sites were functioning and they saw the level of involvement of the job coach, which was their assurance that the job would, in fact, get done each day.

Perceptions of job coach duties and functions. Although the employers' emphasis was on production, they did not consider the job coach as just another body to help get the work done. Employers stated "picking up slack" in peak work times and completing tasks for workers during initial training stages as part of the job coach's duties, but they also understood that

the primary function of the job trainer was to supervise workers and promote independence.

The employer also perceived the job coach as quality controller, observer, supervisor, and intermediary between employers and the workers with disabilities. (See Table 2 for employer perceptions of job coach duties.)

Table 2

Employer Perceptions of Job coach duties

1. Promotes worker independence
2. Provides supervision
3. Gives verbal cues to workers
4. Makes workers correct errors
5. Intermediary between employers and workers with disabilities
6. Helps workers if the job is not getting done
7. Promotes integration with other employees
8. Guidance, showing workers step by step how to do the job
9. Troubleshoots after the workers learn the job
10. Task analyzes job tasks
11. Retrains when jobs change
12. Transports workers
13. Performs quality checks
14. Models the job so that workers can learn
15. Supervises/observes

Employers were impressed by the interest that coaches took in the operation of their business. Of the job analysis conducted by the job coach, one employer said:

> She said she wanted to learn the job herself. We spent one day talking about what the job entailed. She worked along with my staff to learn the job for two days before her workers began. The trainer asked to see the job description that I used with the "regular" staff. Through this process of asking questions, watching my employees, and doing the job herself, she created a task analysis that anyone off the street could follow. It is much more understandable than my own job description.

Employer-job coach relationship. Employers commented that the relationship that they had with job coaches was largely an informal one. Although employers at most sites completed performance evaluations forms for supported employment workers, they stated that they were too busy for a routine of scheduled meetings. However, they expressed satisfaction with the level of communication between themselves and the job coach.

According to employers involved with these three programs, job trainers did not hesitate to discuss positive or negative incidents with them as they occurred. One employer at the dietary site in Program 1 explained why she felt the coach/employer relationship had to be an informal one: "Communication must be open here, because the kinds of problems I have here are immediate ones requiring immediate solutions."

Satisfaction with job performance. When asked about what

they would like the job coach to do differently, employers expressed satisfaction with the status quo. With one exception the employers felt that the job coach was in charge and that they would go to him or her with any job site-related incident that occurred. This confidence in the job coach as a professional was emphasized by employer comments like the following by the bank vice president at the clerical site:

> The only incidents that I can think of that I might bring to the program coodinator would be those related to the coach's performance. In all other situations, incidents would be discussed directly with the job coach. She is in charge of her workers here at the bank.

Of the 16 employers interviewed formally and informally across the three programs, only one employer stated that she would discuss incidents occurring at the job site with the program coordinator as opposed to the job coach. Further probing revealed that she had experienced the transition of two unsuccessful job coaches at her site within the four months preceding the case study. She stated, "I would bring my concerns to the program coordinator, she is the stable one for me, she is the one I deal with." This isolated incident may have implications for the effect job coach turnover may have on coach/employer relationships and ultimately for the stablity of community job sites.

Summary of employer perceptions. An informal relationship stressing open communication between themselves and job coaches was emphasized by all employers interviewed. Employers had communicated with job coaches through formal meetings, and in most cases regularly completed performance evaluations on workers. However, they felt that informal meetings best met their busy schedules and at the same time allowed for problems and incidents to be handled expediently.

The employer perceived the job coach as an on-site professional who was supervising workers with disabilities, not as another "body," there to work along with his or her employees. Employers who were interviewed stated that they would bring any issues that arose on site directly to the job trainer. Because in all three programs it was the program coordinator or job developer who set up the site and was the initial contact for the employer, this reliance on the job coach was evidence that coaches had effectively taken over the role of site manager.

Co-workers

To co-workers, job coaches were visible all day as they trained workers with disabilities. Co-worker responses indicated a wide range of perceptions of job coach duties.

Perceptions of job coach duties and functions. In particular, co-workers at the nonclerical sites (food service,

dietary, bedmaking, and janitorial) described the coach's job as involving a lot of paperwork. Others stated that the job coach was a supervisor, with a role similar to their own supervisor or manager. Still others were able to describe in detail functions performed by the coach. Specific duties mentioned included providing prompts and promoting integration (see Table 3 for co-worker listing of job coach duties).

Some co-workers' attention to job coach duties was evident in interviews. These employees seemed to indicate a personal interest in becoming involved in some training activities with the workers. Although co-worker responses varied, all those

Table 3

Co-worker Perceptions of Job Coach Duties

1. Paperwork/bookwork
2. Promote worker independence
3. Prompt the workers
4. Help the workers to get along with others at work
5. Tell workers what to do when they finsh one job
6. Supervise
7. Help workers finish tasks they cannot yet do
8. Check for quality of work completed
9. Make workers do a job over if it is done incorrectly
10. Make us feel comfortable with the supported employment workers
11. Provide verbal cues
12. Introduce supported employees to other co-workers
13. Does not do any more of the job than she has to
14. Retrain whenever a new method is introduced
15. Train job step by step

interviewed understood that the job coach was providing assistance to workers and not doing the job for them.

Co-worker attitudes toward workers/coaches. There was little evidence of resentment directed toward workers with disabilities or their coach through interviews with the co-workers themselves or their employers. This was especially true when workers with disabilities were performing a portion of the "regular" employee's task so that work was completed more efficiently, in contrast to instances where the co-workers and supported employment workers were performing identical tasks.

One example of co-worker attitudes was reported at the insurance company in Program 3 where supported employment workers sorted policies so that they would be organized for co-workers who performed the next step of the task. One co-worker stated, "I see no real resentment here with regard to the presence of the workers or the trainer. Everyone enjoys someone helping them with their tasks, especially the mundane ones."

In the bank site described in Program 1, supported employment workers and co-workers completed the same task of sorting checks. The employer reported that although co-workers displayed no outward sign of resentment toward the supported employment workers placed there and got along well with them, they did approach her to find out if the company would be hiring any more "handicapped" workers. According to this employer,

co-workers felt that they had a legitimate concern that their work hours would be cut if more workers with handicaps were brought in to do the same job.

Summary of co-worker perceptions. Co-workers' perceptions of the job coach's role on-site varied in sophistication. However, all those interviewed saw the job coach as training workers and not as responsible for doing the work themselves.

Statements of co-worker attitudes toward supported employment workers indicated that job coaches must be aware of various co-worker concerns, depending on specific characteristics of the site. Likewise, they must assume a role of advocate for workers with employers as well as co-workers. This role may include promoting relationships, inservicing co-workers on supported employment workers' abilities, as well as teaching them by example how to communicate with workers with disabilities. Finally, some co-workers interviewed expressed an interest in becoming involved in some capacity of training supported employment workers.

Agency Employees

Perceptions of the job coach role were obtained within the agency from management personnel and direct service personnel.

Perceptions of direct service personnel. How direct service personnel employed by the agency perceived the position of job coach was determined through the agency employee survey.

Direct service personnel included individuals such as workshop floor supervisors, residential staff, and clerical staff. This group rated their own knowledge of job coach duties as average, that is a mean of 3 on a Likert scale of 1 to 5. Direct service personnel were asked to list what they thought were the four most important duties of the job coach.

These responses indicated various levels of understanding of job coach duties and included training clients to act "normally" in the community, training clients in job specific skills, training clients to access community transportation, and documentation of progress toward goals. Three of the 25 agency personnel surveyed stated that they were not aware of the duties of the job coach (See Table 4 for agency employee perceptions of job coach duties).

Comparison of direct service positions. Job coaches, and residential and workshop staff provided direct-service to clients. Therefore, job coaches were often treated comparably to these groups with respect to organizational structure and salary schedules in the adult service agency.

Direct service personnel were surveyed concerning their perceptions of salary, prestige, and responsibility of the job coach position in relationship to other direct service positions in the agency. Respondents felt that the position of job coach offered approximately the same amount of prestige, slightly more responsibility, and slightly higher salary compared to other

Table 4

Direct Service Agency Employee Perceptions of Job Coach Duties

1. Train clients to behave "normally"
2. Train in job specific skills
3. Train to access community transportation
4. Document client progress
5. Data checks
6. Awareness of client potential
7. Set clients up to work
8. Stress quality control with clients
9. Promote community integration
10. Handle behavior problems that occur on site
11. Encourage understanding of developmentally disabled people by co-workers
12. Promote independence on the job
13. Counseling daily
14. Work with employers on site
15. Evaluate client duties on the job
16. Coordinate client information and data between the adult service agency and the supported employment program
17. Make sure that the client completes his job
18. Appropriately convey accurate information at staffings
19. Be a role model for interaction with co-workers
20. Provide transportation
21. Advocate in the client's best interest
22. Establish a one-to-one relationship with the trainee
23. Modify the job to meet client needs
24. Insure the welfare and safety of the clients while on site
25. Disability awareness training for employer and co-workers
26. Provide support and guidance
27. Make recommendations for future goal and objectives
28. Task analyze job duties

direct service positions in the agency (See Table 5 for mean perceptions across programs.)

Although the survey indicated a level of understanding of job coach duties, only 5 of the 25 individuals responding stated that they would consider the position of job coach for themselves (two other respondents were undecided). Perhaps this situation existed because approximately one half of the job coaches previously hired by the three programs had worked in direct service positions within the agency, and thus the majority of personnel who were interested in being job coaches had already been tapped by the program.

The most common reasons given by direct service personnel for lack of interest in the position of job coach included: a) a preference for the ease of working in their current position because rules were well established; b) a preference for a more secure position that had clear-cut and definite duties; c) a dislike of evening work; d) a feeling that their current job was more important and could better serve the needs of clients; e) had not planned on staying with the agency; and f) a general feeling of satisfaction with their present position.

Summary of direct service personnel perceptions. The results of the agency employee survey indicate that direct service personnel understand what duties the job coach performed on site. They rated their overall knowledge of job coach duties as average.

This group of direct service personnel felt that the position of job coach offered the same or comparable levels of prestige, salary, and responsibility as other direct service positions within the agency.

Given this similiar perception of job coach and agency direct service positions on the three characteristics surveyed, only 5 of the 25 individuals surveyed indicated an interest in the position of job coach for themselves. Reasons for lack of interest stated by agency direct service personnel included that the position did not offer concrete, clear-cut duties or established rules, and possible commitment of evening hours. These statements by direct care staff indicate that a degree of flexibility and a comfort with autonomy may be necessary qualities in prospective job coaches.

Perceptions of agency personnel. Perceptions of the supported employment program and of the job coach's role were also obtained from individuals in management positions within the adult service agency. Individuals in management roles included coordinators of Day Training I and Day Training II programs, residential directors, social workers, and executive directors. This group was very positive about the function of the job coach. Most of those interviewed stated that they felt that the job coach was the most important person in the supported employment process (See Table 5 for agency management perceptions of job coach duties).

Important competencies. Important competencies noted by

management personnel within the agency included the ability to promote maximum independence on the part of workers. According to one director interviewed, many agency employees are quick to "do for" the client. She stated that job coaching involved a "coaching concept" that was not understood by many adult service agency employees. This concept, she said, "involves building the clients' own confidence, modeling behavior, and allowing the client to make his own mistakes and learn from them." Inherent in this concept is the confidence on the part of the trainer not to intervene immediately.

One executive director commented on the complexity of job coach duties:

> The agency job description of this position only scratches the surface. We are at fault because we ask people to perform a complex job for little money. The job coach must possess a tacit knowledge of behavior modification. They must also be public relations people, which is a task not required of most of our employees. Finally, they must understand the for-profit business world.

Another executive director explained why the role of job coach in their agency was on a separate scale in terms of salary than direct service personnel that functioned within the walls of the agency:

> Our agency operates on a salary step level and those direct service positions in which that person has to function outside of the agency, that is, supported employment job trainers and apartment trainers, are on a higher salary level because they require autonomous decisionmaking and management skills. These positions by nature assume a high level of judgment, professionalism, and communication skills. There is also a planning-of-training programs component that job trainers have to deal with as opposed to our in-house agency units [Day Training I and Day Training II] in which procedures are already in place and employees need only to implement established programs.

Summary of management perceptions. Agency management personnel who were not directly involved in the supported employment program indicated a favorable attitude toward the position of the job coach; many felt it was the most important position in the supported employment process.

Agency management personnel pinpointed what they felt were competencies that set the position of job coach apart from direct service positions within their agency-based programs. These included such functions as planning and initiating new programs, site management, and public relations.

Executive directors commented on the wages of job coaches in relation to the complex duties that they are asked to perform. Two of the agencies initiated a separate salary schedule for those positions that, unlike traditional workshop positions, involved direct service but also required autonomy and management skills in the community.

Table 5

Mean Responses to Agency Employee Survey: How do you feel the position of job trainer compares to that of agency floor supervisor or day trainer with regard to the following qualities?

	Agency			Total
	1	2	3	
Prestige	3.7	3.3	2.9	3.2
Responsibility	3.7	3.6	3.1	3.5
Salary	4.2	3.1	3.0	3.2

Parents

Although the parents who were interviewed could not pinpoint

Table 6

Agency Management Perceptions of Job Coach Duties

1. Determine step by step the best way to teach the clients
2. Assess whether or not there behavioral problems
3. Provide ongoing support
4. Interpret the job and social skills for the client
5. Client advocacy for salary and working conditions
6. Supervise a group or crew
7. Communicate with employer, program, and school
8. Use behavior analytic principles
9. Public relations for program and agency
10. Having the ability to work in the business world
11. Train them to behave as normally as possible
12. Train social and vocational skills
13. Fill out daily logs on worker performance
14. Attend supported employment staff meetings
15. Coordinate their services with agency individual case managers
16. Go to the job with the client and stay with him or her
17. Work with specific client problem areas when general job tasks are mastered
18. Be able to "back off" as the worker learns tasks
19. Help the client become self-sufficient
20. Help the client have a better self-image
21. Morale booster for client
22. Serve as a role model for clients
23. Analyze the job
24. Make recommendations for future goals and objectives for clients
25. Educate the public and employers
26. Appropriately convey client information at staffings
27. Promote good habits and work attitudes

exactly what coaching involved, they did see the job coach as the facilitator of employment for their sons or daughters. Rather than emphasizing direct training, parents tended to characterize the role of job trainer as one of helper and counselor. One parent described the role in this way, "She explains to them that they must do their work because they are in a "real" job, she keeps them on the right track and guides their thinking" (see Table 14 for a listing of parents' perceptions of job trainer duties.)

Table 7

Parent Perceptions of Job Coach Duties

1. Transportation
2. To "be there" if there is a problem
3. Trouble shooter
4. To give confidence
5. To provide moral support
6. To make sure the workers arrive on time
7. Supervision
8. To show the workers around the building
9. To pitch in and make sure that the work gets done
10. To provide encouragement
11. To teach through their own example
12. To train them to get along with other workers
13. To organize job club for workers

The parent-job coach relationship. A parent's initial decision to place a son or daughter in an innovative community-based program such as supported employment displayed a

degree of trust in program staff. As one parent commented:

> They [the program staff] told us that they wanted her to go out into the community to work. At first I did not think that she would be able to make it. But they promised that there would be someone with her all the time. This fact reassured me.

To assure the continued support, job coaches maintained weekly contact with parents through phone calls. The nature of the contacts was informal. Parents who were interviewed felt that they could contact the job coach with any incident at home that might affect their son or daughter on the job. As with employers, the job coach had set up an atmosphere of open communication with consumers.

Workers

Because of the level of disability of workers at the sites chosen, most could not articulate what their coach did to help them at work (see Table 8 for a list of the worker's perceptions of job coach duties). All workers stated that they liked their trainer, even when he or she made them redo tasks that were done incorrectly.

Comparison of Stakeholder Perceptions

All of the stakeholders' responses reflected an appreciation for the uniqueness of the job coach position. A

perception expressed frequently throughout the interviews of various groups was that the position of job coach could not be assumed effectively by someone not possessing sophisticated skills in the areas of management, communication, and decision making.

Table 8

Worker Perceptions of Job Coach Duties

1. To help us work better
2. To do book work
3. To watch us
4. To correct us when we make mistakes
5. To talk to us about our problems
6. To help us finish our work
7. To teach us
8. To make us do things over when we do them wrong
9. To be the boss
10. To show us around the building

Program coordinators cited crucial competencies such as flexibility, autonomy in desision making, and the ability to rotate quickly among the various roles demanded of the job coach during a given day. Likewise, executive directors stated that the position of job coach required a mastery of many skills, including public relations, an understanding of the business world, and site management, that were not required of other direct service personnel. Finally, agency direct-service personnel who expressed a disinterest in the position of job

coach for themselves stated reasons that reflected a distaste for those same features and complexity of the role that were cited by program coordinators and executive directors as essential competencies. These common perceptions across stakeholders have implications for those in the position of hiring job coaches with regard to individual characteristics that may be desirable.

Parents' perceptions of just what the job coach did on site took on slightly different connotations from those that were voiced by program coordinators and employers. Their perceptions of the job coach's role in the employment of their sons or daughters was one of guidance and protection, unlike program coordinators, employers, and co-workers, who stressed direct training to promote worker independence.

Finally, parents and employers both pledged initial support for the program because a job coach would be with the worker with disabiliites at all times. Both stakeholding groups had different reasons for this request; that is, parents were reassured that a job coach could provide protection for their sons or daughters and employers were reassured that the job coaches were their guarantee that the job would get done. Even though the motives of the two groups differed, the presence of the job coach was the factor that made the program acceptable to them.

Implications of the Case Study Findings

These case studies have some important implications for job coaches in the field, those who have the task of hiring job coaches and those who prepare and provide training for inservice job coaches. Case studies provided empirical validation of the duties and roles of job coaches that had been discussed theoretically by previous researchers (i.e., Cohen, Patton, & Melia, 1985; Schutz, 1986; Wehman & Melia, 1985). Direct on-site observation of job coaches as well as interviews and surveys of various stakeholders in the supported employment process confirmed the previously documented roles and functions of the job coach in the supported employment program. Although geographic considerations and available agency resources may cause job coach tasks to vary slightly across programs (i.e., the case of the coach providing actual transportation services in some rural and suburban programs), a core of job coach roles and functions emerged.

Direct Training

Previous researchers' lists of job coach roles implied the use of direct training strategies as well as a working knowledge of the business world. Direct observation and interview showed job coaches had been resourceful and

innovative in devising ways to motivate and train workers. Although most did not have formalized training in behavior analytic strategies, job coaches used what seemed to be approximations of applied behavior analytic techniques including backward chaining and reinforcing successive approximations. However, use of techniques varied across programs and was sporadic and inconsistent in some instances.

Although systematization of training varied, training for those skills that utilized written programs, task analyses, or behavior checklists were implemented with the most consistency. Results showed that the utilization of task analyses to measure progress toward goals was standard within the programs studied. However, most did not include written procedures for training these goals.

In most instances, coaches had no background in applied behavior analysis. They were not always aware that they were using applied behavior analysis techniques, or if they were using techniques, what these techniques were called, nor were they systematic in their application. This situation was further evidenced by program coordinators' expressed concern that job coaches did not have the confidence to try training techniques long enough to allow them to be effective. Examples included the inconsistent use of prompting levels and the absence of reinforcement schedules.

It is possible that the uncontrolled and demanding nature

of community job placements called for a "what works" approach of behavior management because the on-site coach does not have the degree of clinical control that is present in the classroom or day activity center. Because of the visibility of community job sites to the public and the demands of real jobs in business and industry, it may have been necessary and appropriate to modify training throughout the work day. However, in order for behavior analytic techniques to be effective, systematization and consistency is necessary.

This characteristic of community employment settings has obvious implications for those planning and providing preservice and inservice training for job coaches. Training should include teaching the theoretical basis behind behavioral techniques and the importance of consistency to the success of any applied behavior analytic strategy. Inservice training should persuade caoches that they need not be intrusive at a site in order to be systematic. Individuals must be flexible and subtly systematic in their use of techniques in order to satisfy employer needs while promoting maximum behavior change on the part of workers. The most useful training may include teaching sound decision-making strategies, so that job coaches can identify what technique to employ and why it might or might not be effective, as well as when it is appropriate to modify their use of that technique, based on site constraints.

Stakeholder Perceptions

One of the strengths of case study is that it allows the researcher to gain information and draw comparisons from multiple sources. The methodology was very appropriate for this research because the position of job coach is subject to appraisal by many stakeholding groups.

The aggregation of stakeholder responses demonstrated an overall appreciation for the unique responsibilities of the job coach. Flexibility, autonomy in decision making, and managment skills were considered to be necessary competencies for job coaches.

According to agency management personnel and program coordinators, these skills were not traditionally required of agency direct service personnel. Similarly, the agency employee survey indicated that charactistics of the position such as flexibility, autonomy, and lack of established rules, made the position undesirable to some workshop and residential direct service personnel.

Findings were related across individuals having various levels of involvement in the supported employment process. These results present implications for those who have been or will be in the position of hiring job trainers with regard to individual characteristics that may be desirable.

All groups cited assisting workers with tasks they could not complete in order to fulfill contractual agreement with

the employer as a duty of the job coach. However, all those interviewed also stated that they viewed the job coach as a professional facilitating employment and not just another "body" to help complete the work. Given the production demands of employers, it was important to note that employers also understood this important delineation of job coach responsibilities in order to prevent the exploitation of the job coach on site.

Parental perceptions differed from other stakeholding groups in that they understand the role of the job coach as one of guidance, protection, and counseling. Parents indicated that although they were aware that job coaches were training their sons and daughters, they had no idea what activities or strategies were used, probably because parents were not directly exposed to training, as were employers and co-workers.

Parents and employers alike expressed satisfaction with their relationship with the job coach. Although both groups had occasional formal meetings with the job coach for staffings or to fill out performance evaluations on workers, they felt that informal communication with the job trainer best suited their needs. Both groups characterized the communication between themselves and the job coach as "open," and they felt comfortable in going to the coach with any concerns they might have.

Organization of the Position

Coaches considered that communication through frequent input and feedback meetings was extremely important. Those job coaches who were offered release time or a day in the office expressed more satisfaction with their situation than those trainers who, because of worker schedules, were permanently stationed at the job site.

The utilization of a lead or floating job coach may afford fulltime job coaches the release time that is necessary for planning programs, completing paperwork, or attending meetings. Because job coaches often do not have the time to train workers in ancillary skills, such as banking and travel training, this individual may also assume some of these responsiblities related to worker welfare.

Professionalization of the Role

Salaries of job ocaches varied among the three programs. In Program 3 job coaches were paid on the same scale as direct service personnel working in the agency. In Programs 1 and 2 job coaches were on separate salary schedules that were designed to provide added compensation for direct service personnel who worked away from the site.

None of the job coach salary schedules of the programs studied was commensurate with the starting salary of professionals in rehabilitation or education as recommended in

the results of the Delphi study (Cohen, Patton, & Melia, 1985). Given the demanding nature of the position and the current high turnover rate in Illinois, in order to attract and retain qualified personnel, it is essential to provide a salary for job coaches that is competitive with those of starting teachers and rehabilitation professionals.

The nature of the position requires that coaches be experts in behavior management, effective communicators, and responsible managers. Salary schedules need to reflect the degree of competence expected of job coaches.

It has been established that the role of the job coach is complex, requiring the individuals to juggle many responsibilities. The coach must be a diplomat and sometimes a pacifier for the many groups involved in the supported employment process. He or she must be able to meet both the demands of the business world and the ideals of the social service world. Job coaches must also effectively manage the paperwork that is always a part of any organization that receives funds from governmental sources. At the same time, the complexity of the position offers the job coach an exciting mix of duties ranging from direct service to the autonomy of management and consulting responsibilities.

Job coaches represent the supported employment program to the community, and they are professionals in the eyes of the employers. The structure of the program must provide job

coaches with a blend of responsibilities to reinforce this professionalism and to reduce job coach isolation and burnout at the site.

Strategies to enhance professionalism might include: (a) offering job coaches a voice in the determination of their roles and duties, (b) providing opportunities for on-site as well as community job development activites, (c) providing opportunities to share expertise through particpation in agency or company inservice activities, (d) encouraging special interests such as optional participation in the creation of videos and public relations materials, and (e) inservice courses that refine job coach skills in communication and behavioral technology.

Strategies to combat feelings of isolation and burnout include: (a) frequent scheduled meeting times during which job trainers can discuss site related problems and solutions, (b) an established release time for programming and paperwork, and (c) a floating job trainer to provide release time and support during peak work times.

Future Research Issues

Case study methodology is useful because it is designed to promote understanding of numerous aspects of a single case and preserves the integrity of that case. The major limitation is that the methodology does not produce generalizable results. Despite the limitations inherent in the research methodology that was utilized, these case studies have increased our understanding of some aspects of the role of the job coach and have stimulated the formulation of new questions for future research.

All three case studies offered evidence of the use of at least approximations of behavior analytic techniques to train workers. However, because of assumptions of what techniques were acceptable at the sites or incomplete knowledge of such techniques, strategies were not used consistently or systematically across situations or time. Empirical research is needed to determine just how much systematization and consistency of application of behavior analytic techniques are necessary to produce maximum gains in workers at community employment sites.

Of the job coaches observed, seven had high school diplomas and business experience and two had college degrees in psychology and sociology. Further study is necessary to determine whether it is more effective to employ job coaches

with a social service/education background and give them exposure to the business world or to hire individuals with business experience and teach them applied behavior analytic and education principles.

Two of the programs studied provided release time to their job coaches in the form of a designated amount of time in which they returned to the agency to complete paperwork, create new programs, and network with agency personnel. Given the high turnover rate in the position and threat of isolation because job trainers are alone at the site, further study is needed to discover just what variables contribute to job trainer burnout and turnover.

Employers in the three programs felt that the optimum relationship with the job trainer was an informal one. Research is necessary at many more sites under controlled conditions to determine whether or not these findings can be generalized across employers. There is also a need to know just how much structure is necessary to maintain a productive relationship between employer and job coach.

ISEP
Funded Projects

Facility and Address	Contact Person	Region & Agency
Ada S. McKinley Community Services 330 E. 24th St. Chicago, IL 60616	Virginia Warren George Jones Division Director Adult Rehabilitation Service (312-[illegible]26-1229) Ralph Burlingham Executive Director (312-[illegible]41-6257)	(N) DD 4-DORS Caludette Hall Facilities Specialist
Aid to Retarded Citizens Inc. 2719 S. 11th St. Springfield, IL 62703	Mary Anne Willmore Lark Kirchner Connie Sims Executive Director (217-789-2560)	(E) DD 3-DMH/DD (411)
Alliance for the Mentally Ill of Rock Island and Mercer Counties P.O. Box 4238 Rock Island, IL 61204-4238	Ruth Frig Frank H. Ware Executive Director (309-793-4993)	(N) MI 3-DORS Jay Trimmer Reg. Program Admin.
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Ctr. for Disabled Student Serv. Chicago City-Wide College 226 W. Jackson, 6th Floor Chicago, IL 60606	Patrick McPhilimy (312-368-8803) Dan Woodyatt Sally Vernon Director (312-641-2595)	5B DD 5B-DMH/DD (370)
The Center for Rehabilitation and Training of the Disabled 2032 N. Clybourn Chicago, IL 60626	Carol Woodworth (312-929-8200) Cathy Lorber, Ph.D. Stuart G. Ferst Executive Director (312-973-7900)	DD 5A-DMH/DD (403)

(1-26-88)

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Chicago Assoc. for Retarded Citizens 8562 S. Vincennes Chicago, IL 60620	Robert Lewis Carolyn B. Thompson Dir. of Placement Services (312-651-3720)	DD 5B-DMH/DD (401)
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Comprehensive Services Box 428 Mt. Vernon, IL 62864	Sharon Smith John Metcalf Rehab. Director (618-242-7300)	DD 4-DMH/DD (231)
Cornerstone Services Inc./ Will County Sheltered Workshop 2401 W. Jefferson Joliet, IL 60435	Cindy Lapicki Don Hespell James Hogan Executive Director (815-744-7204)	(E) DD & MI 3-DORS 6-DMH/DD Bill Thomson Facilities Specialist (487)
Countryside Association for the Handicapped, Inc. 1301 S. Lewis Waukegan, IL 60085	Dan H. Melyon (312-689-1500) Ralph E. Walberg Executive Director (312-438-8855)	(N) DD 5-DORS Joe Hamlett Facilities Specialist
Developmental Services Ctr. 1304 W. Bradley Avenue Champaign, IL 61821	Carole Powers Rick Krandel Dale Morrissey Chief Executive Officer (217-356-9176)	(E) DD 3-DMH/DD Jay Lowe Reg. Program Admin. (422)
Effingham Association for Retarded Citizens 618 W. Main St. Teutopolis, IL 62467	Michael Poe Michael W. Fortner Executive Director (217-857-3186)	(E) DD 4-DMH/DD (475)
Effingham County Guidance and Counseling Center 1108 South Willow Effingham, IL 62401	Don Trotter Cheryl Compton Executive Director (217-347-7179)	(N) MI 2-DORS

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Maine Township School District 2601 W. Dempster Park Ridge, IL 60068	Mike Socha Joyce Christensen Executive Director (312-825-4484 ext. 24)	(N) DD 5-DORS Hassan Sayeed Educational Resources Coordinator

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McDonough Co. Rehab. Ctr. 900 S. Deer Road Macomb, IL 61422	Mary Frances Freeman Jim Starnes President (309-837-4876)	(E) DD & MI 1-DMH/DD (364)
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Northwest Mental Health Center 116 Eastman Arlington Heights, IL 60004	Jo Brown Jerry Medow Executive Director (312-392-1420)	(N) MI 4-DORS
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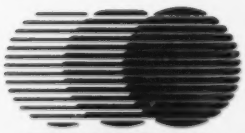
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